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DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, EDUCATION, AND RELATED AGENCIES APPROPRIATIONS FOR 1991

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

SUBCOMMITTEE ON THE DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, EDUCATION, AND RELATED AGENCIES

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and JOANNE L. ORNDORFF, *Subcommittee Staff*

PART 3

HEALTH

(Except National Institutes of Health)

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DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, EDUCATION, AND RELATED AGENCIES APPROPRIATIONS FOR 1991

THURSDAY, MARCH 8, 1990.

OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH

WITNESSES

JAMES O. MASON, M.D., DR. P.H., ASSISTANT SECRETARY FOR HEALTH

J. JARRETT CLINTON, M.D., M.P.H., ACTING ADMINISTRATOR, AGENCY FOR HEALTH CARE POLICY AND RESEARCH

J. MICHAEL McGINNIS, M.D., DEPUTY ASSISTANT SECRETARY FOR HEALTH (DISEASE PREVENTION AND HEALTH PROMOTION)

NABERS CABANISS, DEPUTY ASSISTANT SECRETARY FOR POPULATION AFFAIRS

WILLIAM A. ROBINSON, M.D., M.P.H., DIRECTOR, OFFICE OF MINORITY HEALTH

KENNETH J. BART, M.D., M.P.H., DEPUTY DIRECTOR, NATIONAL VACCINE PROGRAM

WILMER D. MIZELL, EXECUTIVE DIRECTOR, PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS

WILFORD J. FORBUSH, DEPUTY ASSISTANT SECRETARY OF HEALTH OPERATIONS AND DIRECTOR, OFFICE OF MANAGEMENT

W. HARELL LITTLE, DIRECTOR, DIVISION OF PHS BUDGET

DENNIS P. WILLIAMS, DEPUTY ASSISTANT SECRETARY, BUDGET

Mr. NATCHER. We take up now the Office of the Assistant Secretary for Health.

We have before the Committee Dr. James O. Mason.

Dr. Mason, before you give us your statement, tell us who you have with you there at the table.

INTRODUCTION OF WITNESSES

Dr. MASON. Mr. Chairman, I would be delighted to do that. Thank you for your welcome.

Starting on my far left is Nabers Cabaniss the Deputy Assistant Secretary for Population Affairs. Next to her is Dr. Jarrett Clinton, Acting Administrator for the Agency for Health Care Policy and Research. Next to him is Mr. W. Harell Little, Director of the Division of PHS Budget. On my right side is Wilford Forbush, Deputy Assistant Secretary for Health Operations and Director, Office of Management. Next to him is Dr. William A. Robinson, Director of the Office of Minority Health. On my far right is Dennis P. Williams, Deputy Assistant Secretary for Budget.

I would also like to introduce some of the big-leaguers who are here since we have been talking about baseball. Sitting behind me is Wilmer D. Mizell, Executive Director, President's Council on Physical Fitness and Sports, a former Assistant Secretary in the Department of Agriculture, and as you know, a real pitcher.

Also behind me is Art Lawrence, who is with the National AIDS Program Office and Dr. J. Michael McGinnis, Deputy Assistant Secretary for Health who is responsible for disease prevention and health promotion activities.

Mr. **Natcher.** Thank you very much, Dr. Mason. It is a pleasure to have you before the committee again. You have appeared on many occasions. Dr. Mason, I had the pleasure to say to your successor the other day that if he was just half as good as you were he would be all right.

Dr. **Mason.** That was kind of you. I want you to know that he is excellent.

Mr. **Natcher.** I hope he is down at the Center for Disease Control. We will be following events down there to see if he is half as good as you were. We will be pleased to hear from you at this time.

Opening Statement

Dr. **Mason.** Thank you. I would like to read my opening statement and insert for the record the separate statements of the Office of Assistant Secretary for Health and the Agency for Health Care Policy and Research.

Mr. Chairman and members of the committee, we are pleased to be here today to present the 1991 budget request for the Office of Assistant Secretary for Health and the Agency for Health Care Policy and Research.

The Office for the Assistant Secretary for Health is requesting an appropriation of $206 million, which is a net increase of $13.6 million over the fiscal year 1990 level. The increase includes $11.6 million for the Office of Minority Health and is reflective of our efforts to improve the health status of minorities.

Since the establishment of the Office in 1985, some improvements in minority health status have been achieved. However, despite numerous efforts, there continue to be large disparities. In almost every category of mortality, death rates for minorities continue to be uniformly higher than for whites. Life expectancy for Black American males is actually declining, and is now six years shorter than life expectancy for white males.

The budget request presented to you today includes $9.4 million to support the Adolescent Family Life Program's demonstration and research program. This is the only federal program solely focused on the complex issues and problems of early adolescent sexuality, pregnancy and parenting.

In fiscal year 1991, $139.1 million is requested to support the administration's proposal for a State-administered family planning program authorized under Title X of the Public Health Service Act. This is the same level of support as that provided in fiscal year 1990 for the family planning discretionary grant program. Under the administration's proposal, all Title X funds would be awarded directly to States and territories.

Mr. Chairman, since its inception in fiscal year 1988, the National Vaccine Program (NVP) has provided coordination of all PHS vaccine activities and has provided added impetus to activities aimed at developing and introducing safer, improved acellular pertussis vaccines. A comprehensive, long-range National Vaccine Plan is being developed. We are looking forward to submitting the plan to Congress.

The fiscal year 1991 request of $6.9 million is an increase of $1 million over the fiscal year 1990 appropriation which provided $3 million for a pertussis vaccine field trial, and $1.5 million for research on the development of new candidate vaccines. In addition to this budget request, $7 million is requested in the PHS agencies to address high priority NVP activities.

For the management and direction of the Public Health Service, we are requesting $21.1 million and 274 FTEs. This staff assists me with the development of PHS policy and the coordination of a myriad of management functions. In fiscal year 1989 through the efforts of the debt management staff, $79 million was collected and paid into the U.S. Treasury. The fiscal year 1991 request provides resources to support the current level of management efforts.

Retirement pay and medical benefits for commissioned officers: The retirement pay and medical benefits for commissioned officers request of $118.1 million provides retirement payments to Public Health Service commissioned officers, payments to survivors of officers who elected to receive a reduced annuity, and for medical care of active duty and retired officers, their dependents and survivors.

With regard to the Agency for Health Care Policy and Research, the budget request includes $110.2 million in obligations. The Agency for Health Care Policy and Research was formerly known as the National Center for Health Services Research and Health Care Technology Assessment. The purpose of the new agency is to enhance the quality, appropriateness, and effectiveness of health care services and access to such services through scientific research, promotion of improvements in clinical practice, and in the organization, financing, and delivery of health care services.

The Medical Treatment Effectiveness Program is a Presidential initiative to improve our understanding of the effects of health care practices on patient outcomes. The ultimate goal of the program is to provide information to patients and practitioners that will improve the health of our population and optimize the utilization of scarce health care resources.

In fiscal year 1991 $48.5 million in obligational authority is requested for the Medical Treatment Effectiveness Program, an increase of $11 million over fiscal year 1990. The increase for this important Presidential initiative will continue the momentum given to the program in 1990.

The budget request for general health services research and health care technology assessment is $51.2 million in obligations. Specific research activities include health care services in rural areas, clinical practices, health care technologies, health care costs, productivity and market forces, primary care, long-term care, delivery of health services to minorities and the disadvantaged, and medical liability.

We are also requesting $10.5 million for health services research on AIDS and HIV related illnesses, an increase of $2 million over 1990. The Agency for Health Care Policy and Research will support research to study the availability, cost, and utilization of services for different HIV risk groups, populations, geographic areas, and stages of illness and treatment modalities. The increase of $2 million will expand the AIDS Cost and Service Utilization Survey to address the health resource utilization of the asymptomatic population.

Mr. Chairman, I will be pleased to answer any questions you may have.

[The information follows:]

JAMES O. MASON

Assistant Secretary for Health
Department of Health and Human Services

James O. Mason, M.D., Dr. P.H., was sworn in April 21, 1989, as Assistant Secretary for Health, Department of Health and Human Services. Dr. Mason was nominated by President Bush April 7, 1989, and confirmed by the Senate April 19, 1989.

Before assuming responsibility for the U.S. Public Health Service, Dr. Mason had served, since 1983, as director of the Centers for Disease Control and administrator of the Agency for Toxic Substances and Disease Registry. During his tenure at CDC, Dr. Mason also served as acting Assistant Secretary for Health from February to December 1985. Dr. Mason served as executive director of the Utah Department of Health, with responsibility for health and health care financing, from 1979 to 1983. He was associate professor and chairman of the Division of Community Medicine, Department of Family and Community Medicine, at the University of Utah College of Medicine from 1978 to 1979. He directed a multiple-hospital health care corporation owned by The Church of Jesus Christ of Latterday Saints from 1970 to 1975.

As Assistant Secretary for Health, Dr. Mason directs the activities of the Public Health Service, which includes eight agencies: the Alcohol, Drug Abuse and Mental Health Administration; the Centers for Disease Control; the Agency for Toxic Substances and Disease Registry; the Food and Drug Administration; the Health Resources and Services Administration; the National Institutes of Health; the Indian Health Service; and the Agency for Health Care Policy and Research.

Dr. Mason provides policy guidance as well for HHS programs outside of PHS, and maintains relationships with other government and private agencies concerned with health. He advises and assists the Secretary on health policy and on all health-related activities of the department.

Dr. Mason was born June 19, 1930, in Salt Lake City, Utah. He received his B.A. and M.D. degrees from the University of Utah in 1954 and 1958. He received his master of public health and doctorate of public health from the Harvard School of Public Health in 1963 and 1967. Dr. Mason served his internship at Johns Hopkins Hospital in Baltimore from 1958 to 1959, and was an internal medicine resident at Peter Bent Brigham Hospital, Harvard Medical Service, in Boston from 1961 to 1962.

He has received numerous honors and awards. Among these are the Public Health Service Distinguished Service Medal (1988) and the University of Utah's Distinguished Alumni Award (1973). He is a member of a number of honorary and professional societies including the American Medical Association, the Institute of Medicine of the National Academy of Sciences, and the American Public Health Association. He has served on many national and international committees, councils, boards and task forces, including the United Nations Development Program/World Bank/World Health Organization Special Program for Research and Training in Tropical Diseases, Scientific and Technical Advisory Committee; and the National Institutes of Health Recombinant DNA Advisory Committee.

Dr. Mason is certified by the American Board of Preventive Medicine. He has written numerous articles and book chapters on a wide range of subjects related to the prevention and control of disease. He is a national spokesperson on the prevention and control of infectious disease, chronic disease and injury, and a leading architect of public policies concerning these health problems.

Dr. Mason and his wife, the former Marie Smith, have five sons and two daughters: James, Susan, Bruce, Ralph, Samuel, Sara and Benjamin.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Statement of the Assistant Secretary for Health
on
Budget Request for the Office of the Assistant Secretary for Health

Mr. Chairman and Members of the Committee

I appreciate the opportunity to appear here today to discuss the FY 1991 budget request of $206 million for the Office of the Assistant Secretary for Health (OASH) appropriation and the Retirement Pay and Medical Benefits for Commissioned Officers request of $118.1 million.

The FY 1991 budget request includes $19.6 million for the Office of Minority Health; $4.6 million of this amount is for AIDS activities. This is an increase of $11.6 million over the FY 1990 appropriation, and includes $10 million for the Secretary's Minority Health Initiative to improve the health status of minorities. The Office of Minority Health was established in 1985 to implement the recommendations of the Task Force Report on Black and Minority Health. Some improvements in minority health status have been achieved. However, despite numerous efforts, there continue to be large disparities - in almost every category of mortality, death rates for minorities continue to be uniformly higher than for whites. Even more telling, life expectancy for Black American males is actually declining, and is now six years shorter than life expectancy for white males. We must not allow this trend to continue. The Office of Minority Health faces the great challenge of reversing this disparity and has assumed increasing responsibilities as the Department's advocate in issue areas which impact on the health of minority populations.

The Office of Minority Health acts as a catalyst to spur PHS and other public and private agencies to identify opportunities where existing programs and resources can be directed to promoting health and preventing disease among minority populations and to develop innovative strategies to improve the health status of minorities. The increase for FY 1991 will allow us to significantly expand these cooperative activities. In addition to this catalytic and coordinative role, the Office administers two grant programs which are based on the premise that health promotion and disease prevention efforts can be more effective by expanding the base of community awareness and involvement in disease risk reduction efforts. Through one grant program, we have funded 26 minority community coalition demonstration projects. The second grant program has supported 38 AIDS/HIV education/prevention projects for developing culturally sensitive health education materials and strategies for reducing the risk for acquiring and transmitting the HIV infection and AIDS.

The budget request presented to you today includes $9.4 million to support the Adolescent Family Life (AFL) program's demonstration and research program at the 1990 level. This is the only Federal program solely focused on the complex issues and problems of early adolescent sexuality, pregnancy and parenting. Engaging in sexual activity places teens at risk not only of pregnancy, but also of sexually transmitted diseases, some of which are incurable, may cause sterility or even death. Premature pregnancy among unmarried teens places both the teen mother and her baby at increased risk of adverse health as well as for poverty and economic dependency.

AFL prevention programs develop family-centered approaches to encourage teens to abstain from sexual activity, while AFL care programs provide comprehensive services to pregnant and parenting teens and their babies. Adoption counseling and information is provided by all care projects to help teens decide whether to parent their child or make adoption plans. Evaluations indicate that AFL care projects have a positive effect in improving birth outcomes and improving the educational and occupational prospects of teen mothers. Evaluations of AFL prevention projects show that these projects change teens' knowledge about the risks of premature sexual activity and improve their attitudes toward postponing sexual activity.

In FY 1991, $139.1 million is requested to support the Administration's proposal for a State administered family planning program authorized under Title X of the Public Health Service Act. This is the same level of support as that provided in FY 1990 for the family planning discretionary grant program. Under the Administration's proposal, all Title X funds would be awarded directly to States and territories. This would enable States to better integrate Title X funds with other programs to provide primary health care and to improve access to maternal and child health programs. This proposal would also offer States increased flexibility to meet local needs and establish policies which reflect local standards for the provision of family planning services.

Since its inception in FY 1988, the National Vaccine Program (NVP) has provided coordination of all PHS vaccine activities and has provided added impetus to activities aimed at developing and introducing safer, improved acellular pertussis vaccines. This has included sponsoring studies in the United States and abroad such as the large scale pertussis vaccine field trial carried out in Sweden. In FY 1991 the NVP will continue to place priority on development of pertussis vaccines as well as other activities leading to "optimal prevention of infectious diseases through immunization and optimal prevention against adverse reactions to vaccines". The FY 1991 request of $6.9 million is an increase of $1 million over the FY 1990 appropriation which provided $3 million for a pertussis vaccine field trial, and $1.5 million for basic and applied research on the development of new candidate vaccines. In FY 1991 the increase of $1.0 million for the NVP will support an expansion in basic and applied research and support additional staffing. In addition to this budget request, $7 million is requested in the PHS Agencies to address other high priority NVP activities, including $4.5 million for NIH to carry out an additional pertussis field trial, as well as additional basic and applied research on pertussis vaccines. The balance of $2.5 million will be used for monitoring vaccine safety, developing antibody tests and developing additional conjugated vaccines to prevent childhood meningitis.

The Office of Disease Prevention and Health Promotion's budget request of $4.5 million will provide Federal leadership for public and private action toward implementing the Year 2000 prevention goals and objectives; enable follow-up of the Surgeon General's Report on Nutrition and Health with key nutrition policy initiatives; strengthen the delivery of critical preventive services in medical practice and disseminate health information to the public.

The FY 1991 budget request includes $1.5 million to continue the program activities of the President's Council on Physical Fitness and Sports. This program consists of a variety of initiatives designed to promote knowledge and understanding about physical fitness, sports and health and to encourage participation in physical fitness activities. In FY 1991, emphasis will be placed on fitness for older adults, Native Americans, the protective services, the military, the family, and minorities, while continuing to promote physical fitness for all age groups.

The FY 1991 budget includes $3.9 million for the National AIDS Program Office. This Office is the PHS component responsible for coordinating all PHS efforts to prevent and control the occurrence and spread of AIDS and HIV infection. The Office serves as the primary staff support to the Assistant Secretary for Health for PHS policies and activities concerning HIV/AIDS activities and programs.

For the management and direction of the Public Health Service (PHS), we are requesting $21.1 million and 274 FTEs. This staff assists the Assistant Secretary for Health, in his role as line manager of the PHS, with the development of PHS policy and the coordination of a myriad of management functions. In FY 1989 through the efforts of the debt management staff, $79 million was collected and paid into the U.S. Treasury. The FY 1991 request provides resources to support the current level of management effort.

RETIREMENT PAY AND MEDICAL BENEFITS FOR COMMISSIONED OFFICERS

The Retirement Pay and Medical Benefits for Commissioned Officers appropriation provides retirement payments to Public Health Service Commissioned Officers, payments to survivors of officers who elected to receive a reduced annuity, and for the costs of medical care of active duty and retired officers, their dependents and survivors.

Mr. Chairman, I will be pleased to answer any question you may have.

CURRICULUM VITAE

J. JARRETT CLINTON, M.D., M.P.H.

EXPERIENCE

Present	Acting Administrator, Agency for Health Care Policy and Research Public Health Service Rockville, Maryland
1988 - 1989	Director, Bureau of Health Professions Health Resources and Services Administration Public Health Service Rockville, Maryland
1984 - 1988	Deputy Assistant Secretary of Defense for Professional Affairs and Quality Assurance Office of the Assistant Secretary of Defense for Health Affairs Washington, D.C.
1983 - 1984	Associate Administrator for International Affairs, Alcohol, Drug Abuse, and Mental Health Administration Public Health Service Rockville, Maryland
1981 - 1982	Agency Director for Health and Population Agency for International Development Washington, D.C.
1978 - 1981	Senior Representative for South and East Asia The Population Council Bangkok, Thailand
1976 - 1977	Senior Consultant in International Health Family Health Care, Inc. Washington, D.C.
1969 - 1975	Population and Health Officer Agency for International Development USAID Mission to Indonesia Jakarta, Indonesia

1968 - 1969	Graduate Student, Department of International Health, Johns Hopkins School of Hygiene and Public Health
1966 - 1968	Deputy Director and Regional Medical Officer Office of Medical Programs Peace Corps Washington, D.C.
1965 - 1966	Peace Corps Physician Pakistan and India

EMPLOYMENT STATUS

Assistant Surgeon General, O-8
United States Public Health Service

EDUCATION

1983	Senior Fellows Program JFK School of Government Harvard University Cambridge, Massachusetts
1968 - 1969	MPH - Johns Hopkins University Baltimore, Maryland
1960 - 1964	MD - Kansas University Lawrence, Kansas
1956 - 1960	BA - Baker University Baldwin, Kansas

CERTIFICATION

Medical License, Virginia

Diplomate, American Board of Preventive Medicine (Public Health), 1973

DEPARTMENT OF HEALTH AND HUMAN SERVICES

STATEMENT OF THE ACTING ADMINISTRATOR OF THE

AGENCY FOR HEALTH CARE POLICY AND RESEARCH

Mr. Chairman and Members of the Committee:

I am pleased to appear before you today to discuss the Fiscal Year 1991 budget request for the Agency for Health Care Policy and Research.

The Agency for Health Care Policy and Research was established with enactment of the Omnibus Budget Reconciliation Act of 1989 (Public Law 101-239). The purpose of the Agency, as stated by law, is to enhance the quality, appropriateness, and effectiveness of health care services and access to such services through the establishment of a broad base of scientific research, through the promotion of improvements in clinical practice, and in the organization, financing, and delivery of health care services. The new Agency supercedes the National Center for Health Services Research and Health Care Technology Assessment, previously funded in the Office of the Assistant Secretary for Health.

The Agency for Health Care Policy and Research is the newest agency of the Public Health Service but it is built on a solid foundation. Over the last two decades, our predecessor, the National Center for Health Services Research and Health Care Technology Assessment, supported research that has directly supported the work of the Congress. For example, our research provided the foundation for:

- the Medicare DRG payment system and the Rural Health Clinics Act;

- severity of illness measures, which may be used to adjust DRG payments in the future;

- approaches for measuring and improving the quality of patient care;

- measures of disability and health status, such as the ADL (Activities of Daily Living) scale that Congress has used to target disability legislation;

- computerized medical information systems to monitor patients and assist health care providers in diagnosing and treating illness;

- the design of the nation's Emergency Medical Systems; and,

- enhancing the acceptance of the important role that nurse practitioners and physician assistants can play in patient care by supporting research that demonstrated both the quality and cost-effectiveness of the care that they can provide to patients.

The breadth and scope of these past research efforts has left the Agency for Health Care Policy and Research well-positioned to move quickly and aggressively in the new directions mandated by Congress in the Omnibus Budget Reconciliation Act of 1989.

The Fiscal Year (FY) 1991 budget request for the Agency for Health Care Policy and Research is $110,239,000 in total obligations. This represents an increase of $11,401,000 or 11.5 percent over 1990 obligations. The Agency's 1991 budget request is comprised of the following sources of funds: an appropriation from the general funds of the Treasury of $39,126,000; a transfer from the Medicare Trust Funds, pursuant to Section 1142(i) of the Social Security Act, of $28,000,000; reimbursement from the Medicare Trust Funds for health care technology assessment, $1,037,000; 40 percent of the maximum amount authorized for evaluations under section 2611 of the Public Health Service Act, pursuant to section 926(b) of said Act, estimated to be $40,776,000; and one-half of one percent available for National Research Service Awards, $1,300,000, pursuant to section 487(d)(3)(B) of the Public Health Service Act.

Medical Treatment Effectiveness:

The budget request includes $49 million for the Medical Treatment Effectiveness Program, an increase of $11 million or 29 percent over the FY 1990 level of $38 million. As stipulated in Section 1142(i) of the Social Security Act, two-thirds of the request, or $28 million, will be provided from the Medicare Trust Funds; one-third, or $14 million, will come from the general fund of the Treasury; and an additional $6.5 million from PHS 1% evaluation funds will be allocated for evaluative research under this program.

The Medical Treatment Effectiveness Program is a Presidential initiative to improve the effectiveness and appropriateness of health care services and procedures through a better understanding of the effects of health care practices on patient outcomes. The ultimate goal of the program is to provide information to patients and practitioners that will improve the health of our population and optimize utilization of scarce health care resources. This is a departmental program which involves formal collaboration with other agencies of the Public Health Service and the Health Care Financing Administration. Major components of the program are outcomes research and data development, guidelines development, and dissemination and assimilation of findings.

Specifically, the program supports the development of scientific knowledge about patient outcomes through: the development of methodologies to support outcomes research; the development and supplementation of databases to support outcomes research; the support and conduct of outcomes research; the dissemination of information derived from outcomes research; and the development and periodic review and updating of clinically relevant guidelines, standards, performance measures, and review criteria. The increase in funds requested for this important Presidential initiative will continue the momentum given to the program in 1990 by providing substantial increases for all components of the program.

General Health Services Research and Health Care Technology Assessment:

The budget request for general health services research and health care technology assessment, including dissemination and program support is $51 million in 1991. This includes $14.6 million in budget authority and $1 million to be transferred from the Medicare Trust Funds. In addition, $34.3 million is estimated to be available for evaluations under this program and $1.3 million is estimated to be available for National Research Service Awards .

The $14.6 million in budget authority will continue to support approximately the 1990 level for research, and the dissemination of information deriving from research, on health care services and on the systems for the delivery of such services. Specific research includes such activities as health care services in rural areas, clinical practice, health care technologies, health care costs, productivity and market forces, primary care, long-term care, minorities and the disadvantaged, and medical liability.

As provided by section 926(b) of the Public Health Service Act $34.3 million is included for evaluative research in general health services and technology assessment in 1991. Of these funds, $20.5 million will support research on the delivery of health services to minorities and the disadvantaged, rural health research, primary care, health promotion and disease prevention, and medical liability. The other $13.8 million will continue support for the National Medical Expenditure Survey and the Hospital Studies Program.

The 1991 budget request includes transferring $1,037,000 from the Medicare Trust Funds, the same as 1990, for health care technology assessment activities.

Similar to 1990, the Agency for Health Care Policy and Research also will award an estimated $1.3 million for National Research Service Awards in 1991.

Acquired Immune Deficiency Syndrome/Human Immunodeficiency Virus:

The budget request includes $10.5 million for health services research on AIDS and HIV related illnesses, an increase of $2 million over 1990. The Agency for Health Care Policy and Research will support research to study the availability, cost, and utilization of services for different HIV risk groups, populations, geographic areas, and stages of illness and treatment modalities. The increase of $2 million will expand the AIDS Cost and Service Utilization Survey to address the health resource utilization of the asymptomatic population.

Mr. Chairman and Members of the Committee, I will be pleased to answer any questions you may have on the specifics of this budget request.

Mr. **Natcher**. Thank you, Dr. Mason.

Now if you will, tell us how long you have been the Assistant Secretary for Health.

Dr. **Mason**. I was sworn in April 19, 1989. It will be a year next month.

ORGANIZATIONAL CHANGES

Mr. **Natcher**. Have you made any significant management or organizational changes in that time?

Dr. **Mason**. There have been a number of changes. For example, the new agency, the Agency for Health Care Policy and Research is being organized and brought together as a result of congressional activity late last year. We are also submitting for the Secretary's approval changes in our maternal and child health responsibilities that would create a separate bureau dealing with maternal and child health, infant mortality and problems that affect women.

As you know, we have been looking at our regional offices. There are 10 regions that come under the Department of Health and Human Services. We have been looking at their organizational status, the responsibilities of the regional health administrators and the delegations of authority for grants management.

We are evaluating the situation at this time.

Mr. **Natcher**. What are your major objectives, Dr. Mason, for the Public Health Service for the coming year?

Dr. **Mason**. Our major objectives are, first of all, to support Secretary Louis W. Sullivan in his priority areas. Of the five that he has articulated so well, three are predominantly the responsibilities of the USPHS. They include: enhancing the capacity of the nation's biomedical establishment, strengthening health promotion and disease prevention and the targeting of services and resources to disadvantaged populations in the United States of America.

Under those three rubrics we are encompassing all the major responsibilities of the United States Public Health Service.

PHS EMPLOYMENT

Mr. **Natcher**. For the record, if you will, supply a chart showing Public Health Service employment by agency from 1987 to 1991 and break out the AIDS staffing separately, if you will please.

Dr. **Mason**. We will be delighted to do that, Mr. Chairman.

[The information follows:]

PUBLIC HEALTH SERVICE - FTE History

	1987	1988	1989 Actual	1990 Approp.	1991 Pres. Bud
HRSA					
Non-AIDS.........	2,229	2,077	2,151	2,111	1,901
AIDS.............	7	25	30	50	55
Subtotal, HRSA...	2,236	2,102	2,181	2,161	1,956
CDC					
Non-AIDS.........	4,235	3,927	4,155	4,259	4,284
AIDS.............	271	489	555	768	848
Subtotal, CDC....	4,506	4,416	4,710	5,027	5,132
NIH					
Non-AIDS.........	12,322	12,712	12,441	12,707	12,950
AIDS.............	399	537	763	1,072	1,183
Subtotal, NIH....	12,721	13,249	13,204	13,779	14,133
ADAMHA					
Non-AIDS.........	1,561	1,653	1,663	1,786	1,900
AIDS.............	20	47	80	126	148
Subtotal, ADAMHA.	1,581	1,700	1,743	1,912	2,048
AHCPR					
Non-AIDS.........	126	130	129	160	168
AIDS.............	---	---	4	7	10
Subtotal, AHCPR..	126	130	133	167	178
OASH					
Non-AIDS.........	785	774	792	766	781
AIDS.............	7	15	21	32	38
Subtotal, OASH...	792	789	813	798	819
Total, Labor, HHS					
Non-AIDS.........	21,258	21,273	21,331	21,789	21,984
AIDS.............	704	1,113	1,453	2,055	2,282
Subtotal.........	21,962	22,386	22,784	23,844	24,266
FDA					
Non-AIDS.........	6,873	6,932	6,926	7,371	7,864
AIDS.............	90	278	472	506	580
Subtotal, FDA....	6,963	7,210	7,398	7,877	8,444
IHS................	11,720	11,980	12,359	12,586	12,751
TOTAL, PHS					
Non-AIDS.........	39,851	40,185	40,616	41,746	42,599
AIDS.............	794	1,391	1,925	2,561	2,862
TOTAL,PHS.....	40,645	41,576	42,541	44,307	45,461

Mr. **Natcher**. Does your office determine the personnel ceilings for each of the agencies in the public service?

Dr. **Mason**. We do not specifically determine ceilings. We play a role in the budgeting process of identifying how many full-time equivalents are needed in each of the agencies. Then we make recommendations with regard to FTEs which are submitted to the Secretary of the Department.

They go forward to OMB and then are finalized in the President's budget. In our budget for the Public Health Service, the President has recommended an increase of 1,154 FTEs.

DIRECTOR OF NIH VACANCY

Mr. **Natcher**. With the exception of the Director of NIH are all the top positions in the Public Health Service filled at this time?

Dr. **Mason**. We are also in the process of recruiting for a Commissioner of the Food and Drug Administration. Acting Commissioner James Benson is handling it until we are able to make that appointment. In the new agency we have Dr. Jarrett Clinton, who is the Acting Administrator of the Agency for Health Care Policy and Research. A search will be undertaken to fill that position on a permanent basis.

Mr. **Natcher**. How long has the position of Director at the National Institutes of Health been vacant?

Dr. **Mason**. Dr. James Wyngaarden announced his resignation during the summer and left approximately the first of August. So that position has been vacant about six months now.

Mr. **Natcher**. If current recruiting efforts go smoothly, what is the earliest that we can expect to have a new director of the National Institutes of Health on board, Dr. Mason?

Dr. **Mason**. We are working very diligently to hire a new director. You are aware of the problems that we got into with regard to the so-called "litmus test." We have commissioned an advisory committee for the National Institutes of Health because we recognize that there are problems in the position of the Director of NIH.

The job doesn't pay competitively with what a person can get in the private sector or academia. It probably pays one-quarter to a third of what most people are able to earn out there.

There are other problems with the position in terms of the responsibility for developing the nations biomedical care policy. So the advisory committee is assisting the Secretary and me in improving and strengthening that position.

Simultaneously, we have a group of research consultants that are working on the problem. They met two weeks ago and will be meeting again in two weeks. At that time we will again go over a list of promising individuals.

I think that Secretary Sullivan and President Bush are within six to eight weeks of announcing a new NIH Director.

Mr. **Natcher**. The Secretary's review seems to focus on the problem of the independence and authority of the director. Is the issue that NIH is micro-managed from outside or that the Director does not have enough authority over the individual institutes?

Dr. **Mason**. That was discussed at some length. Specifically, the National Cancer Institute, which has probably more authority than any of the other institutes, came up in the discussion of the advisory committee. One of the problems as well, and I really hesitate to mention this, is that I think Congress has micro-managed NIH a bit and deleted and had some negative effects upon the authority of the NIH director. They have created a whole group of institutes which makes it increasingly difficult to control. I think within my office, within the office of the Secretary, we can identify areas where we have tended to try to detract from the power of that position. We find there are a number of things that can be done to correct the situation.

Some will require legislative help. For instance, we will need to come back to Congress with regard to the salary problem. I think we need to work on all these problems. It is like the Pogo comic strip. We have met the enemy and they are us, all of us. I think we need to put a little more strength back into that position.

SUPPORT FOR NIH

Mr. NATCHER. Dr. Mason, as you well know, our subcommittee is not the authorizing committee as far as adding new institutes. If we had been in charge maybe they would not have added some of the institutes. I believe we have 13 now as far as the National Institutes of Health are concerned.

Dr. Mason, if anybody asks you, you tell them when I was first elected a Member of this committee we had $73,000,000 in the budget for NIH. Last year the figure was $7,576,000,000. If Lou Stokes and Silvio Conte and I and the other members of this subcommittee had our way, it would be $10,000,000,000.

So we have been following carefully on this subcommittee all of these matters. NIH has never had a better friend, Dr. Mason.

Dr. MASON. I think it has a lot of friends both in Congress and in the Executive Branch of government. This ought to be a very promising time for biomedical research in the United States.

It just has to be not only in the context of quality of life and the health of the American people but so that we can maintain our competitiveness in international markets, our balance of payment. We appreciate your support and the support of other members of this subcommittee with regard to this effort.

NIH GRANTS

Mr. NATCHER. Dr. Mason, this year NIH is facing a serious problem, as you know, because of the reduced number of new grants which, as you know, is down around 4600 compared to over 6200 several years ago.

This problem is largely the result of NIH's decision to lengthen grants which leaves less funds for competing awards. Doctor, given the cost of this decision, is this a good decision, one you support?

Dr. MASON. I support that decision. When we look at the total number of grants that will be funded in the 1991 budget for NIH it will go well above 20,000. This, I think, is significant. The numbers would have increased even more had we not funded grants for longer periods of time.

But we find in the context of the complexity of biomedical research, bio-technology, that often a grant can't be finished in two or three years like it was in the past. I think we get more outcome, more measurable outcome, by having a longer granting period than going through the process of rewriting applications and peer review on a more frequent schedule.

We are looking for accomplishment and outcome. I think that is more important than just a head count of the number of grants.

Mr. **Natcher**. Mr. Conte, I yield to you.

Mr. **Conte**. Thank you.

Dr. Mason, Dr. Clinton, I want to welcome you both and your supporting witnesses. Dr. Mason, you did an outstanding job over at CDC.

Dr. **Mason**. Thank you.

Mr. **Conte**. We know you will leave your mark as Assistant Secretary for Health.

Dr. Clinton, you have compiled a very impressive array of experience at HHS, Defense, at AID. As acting director of the new health policy agency, you will face a unique set of challenges.

REGIONAL OFFICES

The fiscal year 1990 conference report contains language stating: "No funds are provided or to be used for the reorganization of the Public Health Service regional offices, prior to approval of a reprogramming request." This is meant to include any changes in the way the regional offices operate, including any plans or proposals to centralize grant-making authority. Dr. Sullivan said during his testimony before our committee that the Department will comply with this language.

On behalf of the Public Health Service, can you state your intention? Will you as Assistant Secretary comply with this language?

Dr. **Mason**. In both the spirit and letter of the law I will be happy to comply with it. That is our intention.

EFFECT OF SEQUESTRATION

Mr. **Natcher**. Last year the Public Health Service took a big hit from last year's sequester along with all the other agencies, OMB, Ways and Means, the Budget Committee ran rough shod over the whole budgeting process while we on the Appropriations Committee keep our promise to abide by the rules, Gramm-Rudman-Hollings has become unworkable.

What they have been doing reconciliation, they are taking on spending programs that don't stand a chance on their own and paying for them out of programs like yours, Dr. Mason.

What has been the dramatic impact of the sequester on the Public Health Service? Has it meant less vaccines available from CDC and fewer NIH grants?

Dr. **Mason**. There is no question of the impact on our programs. Our budget for 1990 was $15,438,000,000 before sequestration. The 1990 sequester amount was $184,577,000.

It has a tremendous effect. NIH awarded 97 fewer research grants and a reduction of 26 traineeships plus a downward adjustment of each award. ADAMHA had a reduction of 50 traineeships and 33 fewer grant awards.

Block grants such as the Maternal and Child Health and the alcohol drug abuse and Mental Health services were reduced by 11%. You can see across the whole spectrum we had to absorb an almost $185,000,000 cut.

Mr. CONTE. That is rough. Will you submit for the record a summary of the programmatic losses at the different agencies of the Public Health Service as a result of last year's sequester?

Dr. MASON. We will be happy to do that.

[The information follows:]

IMPACT OF SEQUESTRATION

The FY 1990 sequestration resulted in a total reduction of $184.6 million in Public Health Service activities. The funding levels appropriated for each program, project and activity in PHS were reduced on a pro-rated basis. The amount and a brief summary of the impact of sequestration, by PHS agency, is as follows:

Food and Drug Administration—$7,092,000—Defer funding for contracts and planned equipment purchases.

Health Resources and Services Administration—$23,262,000—Reduced funding for the Maternal and Child Health block grant by 11% and reduced the Community Health Centers and Migrant Health program by $5,691,000.

Centers for Disease Control—$14,217,000—Reduced funding for the Prevention block grant by 11 percent.

National Institutes of Health—$96,570,000—There were 97 fewer research project grants and a reduction in the amounts non-competing continuations received. The number of traineeships was reduced by 26 and each award amount was reduced.

Alcohol, Drug Abuse and Mental Health Administration—$26,745,000—An 11% reduction was taken the ADMS block grant, 33 fewer research grants were awarded, with a reduction in the amounts that non-competing continuations received. There were also 50 fewer traineeships.

Indian Health Service—$15,686,000—Reduction of the hospital and clinic programs and a reduction in contract care.

Agency for Health Care Policy and Research—$423,000—Reduction of 3 competing grants in health services research, including AIDS and HIV-related activities.

Office of the Assistant Secretary for Health—$582,000—Reduction in the amount of contract and grant awards. For management, other than a few senior positions, vacancies could not be filled.

SENIOR BIOMEDICAL RESEARCH

Mr. CONTE. Senior Biomedical Research Service. As you know Dr. Mason, I introduced a bill that would create a Senior Biomedical Research Service in the Public Health Service. It would improve compensation and retirement benefits that would make NIH and ADAMHA competitive with the outside institutions.

Science magazine said the compensation issue is crucial not only for the director's job but for the future of NIH itself.

Wouldn't a competitive pay package go a long way towards recruiting and retaining key senior scientists at NIH?

Dr. MASON. Absolutely, yes.

Mr. **Conte**. If we don't improve compensation now what will be the future impact of continued losses in NIH and ADAMHA?

Dr. **Mason**. With the exception of two recent employees, NIH has not been able to attract a senior scientist from outside of government in the past 10 years.

We do our best, not just at NIH and ADAMHA, but at FDA and CDC where the same problems occur.

We do our best to recruit them at the lower levels where the pay is more attractive but we are becoming a training ground for academia and the private sector.

We train them by bringing them in as visiting scientists and trainees. Then, when we need them the most, they go to take positions elsewhere. That is wonderful. But if we cannot retain and cannot invigorate our structure by having people coming and going at the top level, then we become too inbred.

This is producing problems throughout the whole service.

Mr. **Conte**. It is like baseball, they become free agents and demand whatever they want to get on the outside.

Dr. **Mason**. That is right and we are in the Little League.

Mr. **Conte**. Why have outside salaries risen so quickly?

Dr. **Mason**. In the United States of America we are not training enough scientists. We are going to have to go clear down to grade school and begin to improve our educational situation. We are turning out a fraction of the scientists needed in government, industry and academia. As we project into the next 20 years we see this problem becoming greater and greater.

We have the capability in the United States of America to train some of the finest scientists in the world and they are second to none. But they are going into law and business and not the hard biomedical sciences.

It is not just us but NASA, engineering in the whole field. We need to do something at all levels. I think that is one of the levels we are having to compete. We want to bring more minorities into the scientific pool. We will have to get down into grade school and this will have to take a comprehensive approach on the part of the whole country.

I have asked ADAMHA and NIH and other agencies within the Public Health Service to look at this. We have a committee looking at how we can attract more people into the field. Salaries is a complex issue but one of the problems is also the scarcity of people willing to go into these fields.

NIH DIRECTOR

Mr. **Conte**. You mentioned that you are leading a task force to look at how we can improve the NIH directorship to make it attractive to the best candidate. It has gone eight months now without a director. There is no one in sight as far as I can see.

Where are we now in the search for a new director?

Dr. **Mason**. Well, we are progressing. We have a group of research consultants. They met two weeks ago and will meet again in another two weeks. I intend to turn over to Secretary Sullivan a short list of individuals who are imminently qualified in the administrative and management field and also have the necessary science background.

I think that Secretary Sullivan and President Bush are going to be able to attract one of those people on the list due to the work that the advisory committee is doing and the changes we have already made and those changes that Secretary Sullivan and I can bring about.

With the promise that Congress will help us in the future with salaries, tenure and a number of other things, I think we have something worth offering. I believe there are candidates out there who would like to come and lead the nation's premier Biomedical Research Institute as we go into the 21st Century.

Mr. **Conte**. So you do have a list?

Dr. **Mason**. Yes.

Mr. **Conte**. There has been talk of a six-year term for the director, is anything moving on that?

Dr. **Mason**. That was one of the recommendations of the committee, that the person have tenure like the Surgeon General. That would help a person, if they felt they would be there long enough to invest in moving ahead and giving us the plan the nation needs.

Mr. **Conte**. And not being thrown out with the new Administration coming in?

Dr. **Mason**. Yes, I don't want to go into details but I don't think there has been as much of that as is commonly perceived.

Mr. **Conte**. I am glad to hear that. But that fear is there. There is a perception by all means.

Dr. **Mason**. I agree with you there.

Mr. **Conte**. Well, the whole country is topsy turvey. We gave ourselves a pay raise and we got criticized. I voted for it. It is not that people like Bill Natcher and I have been here a long time. It is the twilight of our career but I felt there were a lot of people out there in the government especially at NIH and other parts of the government who were grossly underpaid. I have nothing against at least, as my friend knows, by comparison what they are getting, $1,000,000, $2,000,000 a year in baseball and football, look at the so-called championship fight, the Tyson fight. Here you have scientists who can maybe save the world, maybe come up with a cure for cancer or AIDS and something else and you are paying them a pittance.

The scientists will come up with a cure for some of these diseases. Yet the public just does not understand it. They don't get behind us. I hope we will get our bill through. I will put everything I have behind it.

Thank you, Mr. Chairman.

Mr. **Natcher**. Mr. Stokes.

SCIENCE EDUCATION

Mr. **Stokes**. Thank you. It is nice to welcome you before our subcommittee this morning.

I was pleased to hear your comment a moment ago, Dr. Mason, relative to the field of science and what we need to be doing. I learned in a hearing a few days ago with the Director of the National Science Foundation that only 6 to 7 percent of American students graduating from high school today are prepared for college level science courses.

That is a sad commentary reflective upon our academic preparation for the students who are contemplating going to college. Compounding this problem, many of these young people, instead of going into engineering and fields of that sort, now are going into finance, accounting, and law. We also find now that more than 50 percent of the engineering schools in this country are occupied with foreign students as opposed to American students.

So there is a very real educational problem in this country.

OFFICE OF MINORITY HEALTH

I was pleased to see the increase in the President's proposal for the Office of Minority Health. But it appears that all this money would not remain there. Would some of these funds be passed through OMB to other agencies?

Dr. **Mason**. The increase Secretary Sullivan requested was a total of $117,000,000. Of that, approximately $11,000,000 will go to the Office of Minority Health. The rest of that will be going to the Health Resources and Services Administration where it will be specifically used for beefing up the National Health Service Corps and be specifically targeted to minority physicians and other health care providers.

It will go for training of minority health care professionals. So it is being distributed largely in those two programs—Health Resources and Services Administration and the Office of Minority Health. Dr. Robinson, do you want to comment on that?

Mr. **Stokes**. What I am really getting at is some of these funds are going to be used to support an HHS-HUD initiative, as well as projects with other agencies within HHS. That is what we get from the budget justification.

Dr. **Robinson**. That is right. That is the administration proposal. That is what was put forth in the budget submission. The specifics of that program will be discussed with the committee this afternoon when HRSA comes to testify. I can give you some specifics in how we will attempt to utilize that $10,000,000 for minority health.

The other proposals are part of a broader strategy not to just target the Office of Minority Health and its programs but to see how the Department overall can utilize other potential avenues to address minority health issues. The HUD initiative is something that is really new. The Secretary just, I think it was the end of January, signed an agreement with Secretary Kemp from Housing and Urban Development for a new initiative under which we in HHS will be collaborating with HUD to try to do some things to address the issues of homeless people, people who have problems maintaining homes or even finding rental homes, tying those problems in with other social problems that affect social security, medicaid constituents and others.

We need to collaborate better. This initiative for the $35,000,000 is going to be potentially one aspect of this broader activity that the Secretary wants to accomplish.

The other activities are more specific and are geared toward some interaction with the National Health Service Corps programs and other programs aimed at students and some minority institutions. Again, I think the group that will come in this afternoon can give you better information on that.

Mr. **Stokes**. Maybe we will defer some of the questioning for them. I get a little different picture from my reading of the justifications than what you are telling me this morning.

MINORITY HEALTH INITIATIVE

Dr. **Mason**. If I could comment on that, I think this goes back to the purpose in creating an Office of Minority Health in the Office of the Assistant Secretary for Health.

We don't want to create another agency for minority health where large amounts of money would be available for direct spending from the Office of Minority Health.

The office has a role to be a catalyst, a coordinator and to be an alter ego and a conscience to the Assistant Secretary for Health and the Secretary. We want each of the agencies, CDC, NIH, ADAMHA, HRSA, Indian Health Service, to be targeting minority health and get in tune with getting services to disadvantaged people.

The delivery system will continue to be in the agencies of the Public Health Service. Bill Robinson and his staff, working with the Secretary, and me, will see that those things are occurring in the delivery programs to assure that minority concerns are being considered with the expenditure of every dollar of the total $15,000,000,000 in the Public Health Service.

Mr. **Stokes**. Dr. Mason, what I was trying to get at here, in terms of the $11,600,000 increase for the Office of Minority Health, whether that money will stay in the Office of Minority Health or whether it is utilized to deliver services through other agencies such as HUD.

Dr. **Robinson**. That $35,000,000 proposed for collaboration with HUD is what I want to keep aside from the current discussion of the Office of Minority Health because that is a different issue. That money will not be transferred to HUD. The intention is to develop collaborative programs, new demonstration activities that are not in existence at this time.

Let me set that aside for now. In terms of the increase that would come to the Office of Minority Health, we are hoping to use at least $4,000,000 of that as a catalyst, stimulus for inter-agency and cooperative agreements.

There are many things that are happening to improve minority health but we do not have enough of a minority emphasis in spite of the many billions of dollars in resources that are in the Department. One example is: In the Centers for Disease Control, the National Center for Health Statistics conducts a number of studies through which they collect data on the population at large. At times it is important to have specific information for sub-segments of the population, Hispanic, Black, Native Americans, Native Hawaiians, et cetera.

What we would do with some of that money potentially is to piggyback on some existing surveys such that they can effectively address minority data needs by over-sampling specific population groups. We need the data for minorities and it would not come out if they did not have the additional support.

We will try to piggyback on some activities and encourage new activities in the Indian Health Service and Centers for Disease Control. The Indian Health Service has a number of programs addressing the needs of the American Indian population but it is mostly reservation facilities. We have a significant concern about the Indian population in cities and off reservation, who are not benefiting from some of those programs.

So we would collaborate with IHS to try to use some of that money to try to help them develop additional programs. The idea is to be a catalyst, coordinate and collaborate inter-agency agreements so our money can seed additional activities in that area.

MINORITY HEALTH—UPDATE TASK FORCE REPORT

Mr. **Stokes**. I note that $1,000,000 is being proposed in the President's budget for the purpose of reexamining the findings of the original minority health task force appointed by Secretary Heckler. What is the purpose of a reexamination in light of the fact that even by your own remarks this morning at the beginning of your statement we know that black males are dying six years earlier than white males?

We have seen no real concrete evidence of the fact that there has been any appreciable or significant eradication of the disparities between black and white health in America over the last five years since the report came out. What is the purpose of the reexamination of the original report?

Dr. **Mason**. The report was commissioned and completed in 1985. It used data that was then available, probably 1983 data. You are absolutely right. There are areas where we appear to be losing ground. The report addressed cancer, heart disease, stroke, complications of diabetes, violence, and infant mortality.

I think 1991 is an appropriate time to issue a report card to the nation, an official report card as to what has been happening in a six-year period since that first report was provided, to go back and look at the data available to the committee then and look at what is available now, then issue a report card and use it as a milestone to confirm exactly where we are.

There is another purpose to do this in 1991. We are beginning the Year 2000 Objectives for the Nation. We will need a good baseline of where we are with regard to certain parameters of health, to begin measuring from where we are going and where we want to be by the end of this century.

I think it is time to take another look. If we have not made progress, we should declare that we have not, and then look again at our plans. Where we have made progress, let's say something is working and do more of that.

Mr. **Stokes**. I can appreciate that explanation, Dr. Mason, because it does make sense to see whether or not the nation has responded to that report.

What worried me was that we were going to do another study. That problem has been studied more than any other one in the nation. That task force was one of the finest task forces ever appointed in this nation to undertake this type of study.

No one has assailed the findings. Indeed has been accepted in every quarter of the nation. We just didn't want another study.

Dr. MASON. I think the data is there. It is just pulling it together and issuing a report card.

HISTORICALLY BLACK COLLEGES AND UNIVERSITIES

Mr. STOKES. Last year the committee expressed its concern over the low level of participation of minority institutions in the training and research programs of the Public Health Service. We directed OASH to develop a plan to increase minority participation in those programs using the Office of Minority Health in this effort.

What progress has been made in this regard?

Dr. MASON. I think we are making a lot of progress. This is unfinished business obviously. The PHS provided in 1989 nearly $57,000,000 in direct funding to historically black colleges and universities.

As a result of the direction that we have received from this Appropriations Committee, we have held a number of conferences and workshops to involve minority scientists and research advantages, stimulate interest in research and research training.

We have supported activities at historically black colleges and universities to develop curriculum and convene workshops. We will be doing similar things with institutions that have large numbers of Hispanic and Asian-Pacific Island students. I think we are beginning to make some substantial progress and we will continue to do that. This is the kind of thing that we need to put energy in and do something about.

I can tell you we have a Secretary who believes in this. He reminds us every other day if not every day. I think we are going to make significant progress in the Public Health Service in carrying out that mandate.

Mr. STOKES. Mr. Chairman, I have a number of questions to submit for the record.

Mr. NATCHER. Fine, Mr. Stokes.

AIDS DRUGS

Now, Dr. Mason, there have been a number of new developments affecting the AIDS epidemic and treatment for victims of AIDS. Tell us what changes you see in this area over the next three or four years.

Dr. MASON. First of all, I think in the past year we have learned that because of the investment that has been made in biomedical research that effective therapies are coming out of the pipe line. That is a direct result of funding by medical research. We have a number of drugs now licensed and available such as aerosolized Pentamidine and AZT. I think the most significant finding is that both of these drugs cannot only be given to people who are symptomatic; but, by identifying people who have been infected with the HIV virus and then when their immune system begins to deteriorate, we can count the so-called T-cells. These cells ward off opportunistic and other infections. By counting the T-cells in these individuals—when they reach the level of 500 (as in the case of AZT), or as low as 200 (as in the case of aerosolized Pentamidine) they can be given the AZT or aerosolized Pentamidine and we can postpone the onset of symptomatic disease.

I think this is a striking advance and it bodes very well for the future. We now know that with modern chemotherapy we can help patients who are infected and we can help them to not develop symptoms as they would have otherwise. In the next two or three years, I think we will see additional numbers of powerful drugs and we hope less adverse reactive drugs will be available to treat people who have symptomatic and asymptomatic AIDS.

We are seeing progress. As you read in the newspapers there are at least two biotech companies that are now going to begin testing vaccines. I think we are going to learn more about the possible effect of vaccines in preventing disease.

A lot of that will come forth and unfold in the next three years. I am not saying we will have a licensed vaccine in that time because it will not occur that rapidly but we are beginning to see glimmers of hope in the vaccine arena. We have now licensed drugs that are available for both treatment and prevention.

NUMBER OF AIDS CASES

Mr. **Natcher**. How many cases of AIDS have been diagnosed in this country since the disease was first identified?

Dr. **Mason**. This number, as you know, changes on a daily basis. We are now approaching 122,000 infections that have been reported. We have to recognize that not all of those infections do get reported even though CDC does their best to get complete reporting. We are probably missing as many as 10 to 30 percent of the cases. You can inflate that 120,000 by 10,000 to 20,000 additional cases.

Mr. **Natcher**. How does this figure of 122,000 compare with a year ago?

Dr. **Mason**. Between 1988 and 1989 the number of cases increased by about 40,000. In 1989 we estimate there were between 44,000–50,000 cases. It is inflated for those that were not reported. I should make it clear that the numbers I have been talking about are cases that meet the criteria for reporting. The number of infections in the nation is unknown but it is estimated to be around 1,000,000 infections.

Mr. **Natcher**. Can you give us the annual figures for cancer and heart disease?

Dr. **Mason**. For those diseases we measure not in reported cases, but in deaths. The number of deaths from heart disease is 750,000 a year and cancer is 475,000.

Mr. **Natcher**. What is the outlook, Dr. Mason, for the number of AIDS cases four or five years from now?

Dr. **Mason**. We have been looking at those projections and they are projections, at best. We feel that by 1993 the number of individuals who have been diagnosed will be somewhere between 390,000 and 480,000. The cumulative deaths will be between 285,000 and 340,000 and infected individuals who could benefit from care or treatment, somewhere between 500,000 and 640,000.

AIDS SPENDING

Mr. **Natcher**. Your 1991 request for AIDS is $1,695,000,000, an increase of $109,000,000 or 6.9 percent over 1990. That is a considerably smaller increase for AIDS than what we have seen over the past several years, as you know. Last year, I believe the increase was 24 percent.

What accounts for the reduction in rate of growth in AIDS spending, Dr. Mason?

Dr. **Mason**. There are a number of reasons for the reduced increase.

First of all, the figures that you accurately cited are the Public Health Service's and do not represent the total Federal expenditure for AIDS. If you added what was being spent in other parts of our Department, the Health Care Financing Administration, for example, for medicare and medicaid, social security disability, the Department of Defense and in the Veterans' Administration, you would find that there are significant increases in AIDS expenditures.

The Public Health Service budget is really targeted at prevention, education, and research. As we looked at our needs for research, prevention, education, and surveillance, we found that we could do that with the increase of $109,000,000.

This does not include needs that are on the treatment side which are represented in other parts of the Department and federal budget.

AZT COST

Mr. **Natcher**. Dr. Mason, as far as AZT is concerned, what are we considering as the cost now for treatment using this particular drug?

Dr. **Mason**. As you know, two things have happened during the past year. First of all, the company that is licensed to sell AZT, Burroughs-Wellcome, has decreased the cost of the drug.

Secondly, we found that patients can get along on smaller doses. The current cost is a reflection of those two factors. The average cost is around $3000 to $4000 a year for a person to be treated with AZT.

AIDS FUNDING

Mr. **Natcher**. Did the department request substantially more AIDS money from the Office of Management and Budget than the amount that was alluded in the final request?

Dr. **Mason**. There is a difference between the requests. The original request at the agency level was higher. It has been changed at each step, as is the case with other diseases.

Mr. **Natcher**. Give us some figures. What did you request?

Dr. **Mason**. The request to me from the agencies was $3,100,000,000. The request that I made to the Department was $2,200,000,000. The Department request to OMB was $1,760,000,000. The final President's budget which is before you is $1,694,000,000.

Mr. **Natcher**. How much of the $1,694,000,000 is for brand new activities and how much is for expansion of on-going activities?

Dr. **Mason**. I would like to give some thought to that question and break it down into those two categories and supply that for the record, if I might.

Mr. **Natcher**. That will be good.

Also for the record, if you will, update the historical tables that appear on pages 872 through 880 of last year's hearings.

[The information follows:]

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

		FY 1991				
	FY 1990 Estimate	Current Level	Expansions	New Efforts	President's Budget	Change from FY 1990
FOOD AND DRUG ADMINISTRATION	$56,220	$59,014	$4,222	---	$63,236	$7,016
HEALTH RESOURCES AND SERVICES ADMINISTRATION	112,503	61,467	---	11,212	72,679	(39,824)
INDIAN HEALTH SERVICE	0 a/	1,013	---	---	1,013	1,013
CENTERS FOR DISEASE CONTROL	442,826	453,804	29,819	25,480	509,103	66,277
NATIONAL INSTITUTES OF HEALTH	743,532	749,716	40,492	9,956	800,164	56,632
ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION	214,647	210,498	12,632	6,519	229,669	15,022
AGENCY FOR HEALTH CARE POLICY AND RESEARCH	8,474	8,452	2,053	---	10,505	2,031
OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH	7,676	7,966	557	---	8,523	847
PHS TOTAL	$1,585,878	$1,551,930	$89,795	$53,167	$1,694,892	$109,014

a/ Interior Appropriations Committee did not appropriate funds for IHS AIDS activities; Labor/HHS Committee agreed to fund IHS AIDS activities within amounts appropriated to PHS agencies. At this time the reprogramming has not been approved.

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

	FY 1989	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
FOOD AND DRUG ADMINISTRATION	$73,775	$56,220	$63,236	$7,016
HEALTH RESOURCES AND SERVICES ADMINISTRATION	59,945	112,503	72,679	(39,824)
INDIAN HEALTH SERVICE	800	0	1,013	1,013
CENTERS FOR DISEASE CONTROL	377,592	442,826	509,103	66,277
NATIONAL INSTITUTES OF HEALTH	602,294	743,532	800,164	56,632
ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION	173,336	214,647	229,669	15,022
ADMINISTRATION FOR HEALTH CARE POLICY AND RESEARCH	6,831	8,474	10,505	2,031
OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH	6,439	7,676	8,523	847
PHS TOTAL	$1,301,012	$1,585,878	$1,694,892	$109,014

PUBLIC HEALTH SERVICE	FY 1989	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research	$616,686	$755,200	$807,232	$52,032
II. Risk Assessment and Prevention	540,297	638,059	729,437	90,778
III. Product Evaluation, Research, and Monitoring	51,275	56,220	63,236	7,016
IV. Clinical Health Services Research & Delivery	62,331	117,368	72,952	(44,416)
V. PHS-wide Activities	30,423	18,431	22,035	3,604
PHS TOTAL	$1,301,012	$1,585,878	$1,694,892	$109,014

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

PUBLIC HEALTH SERVICE	FY 1989	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research				
A. Biomedical Research	$168,508	$197,956	$212,922	$14,966
B. Neuroscience & Neuropsychiatric Research	27,008	36,848	40,783	3,935
C. Behavioral Research	112,370	125,494	125,889	395
D. Therapeutic Agents	235,261	303,678	326,388	22,710
E. Vaccines	59,819	78,633	86,130	7,497
F. Research Enhancement	13,720	12,591	15,120	2,529
subtotal	616,686	755,200	807,232	52,032
II. Risk Assessment and Prevention				
A. Surveillance	84,714	100,139	110,834	10,695
B. Population-Based Res: Nat Hist, Trans, Risk Factors.	152,385	177,953	197,216	19,263
C. Information & Education/Preventive Services	303,198	360,567	421,387	60,820
1. High Risk or Infected Persons (non-add)	(152,079)	(175,259)	(203,978)	(28,719)
2. Special Minority Initiatives (non-add)	(33,757)	(48,962)	(53,210)	(4,248)
3. School and College Aged Youth (non-add)	(36,002)	(46,285)	(53,293)	(7,008)
4. General Public & Special Programs (non-add)	(44,537)	(52,725)	(62,415)	(9,690)
5. Health-Care Workers & Providers (non-add)	(25,908)	(26,534)	(33,689)	(7,155)
6. Prevention Capacity Enhancement (non-add)	(10,915)	(10,802)	(14,802)	(4,000)
subtotal	540,297	638,659	729,437	90,778
III. Product Evaluation, Research, and Monitoring				
A. Therapeutic Agents	20,056	19,181	24,760	5,579
B. Vaccines	7,848	9,964	9,688	(276)
C. Diagnostic Reagents and Test Kits	8,284	7,364	10,227	2,863
D. Blood and Blood Products	7,412	11,047	9,150	(1,897)
E. Medical Devices	7,675	8,664	9,411	747
subtotal	51,275	56,220	63,236	7,016
IV. Clinical Health Services Research & Delivery				
A. Services	42,791	87,749	41,529	(46,220)
[Drug Subsidy Programs (non-add)	[15,000]	[29,606]	0	[-29,606]
B. Pediatric Demonstrations	7,806	14,803	14,735	(68)
C. Construction	3,903	4,342	4,129	(213)
D. Research	7,831	10,474	12,559	2,085
subtotal	62,331	117,368	72,952	(44,416)
V. PHS-wide Activities				
A. OASH/NAPO	3,023	3,666	3,935	269
B. Contingency Fund	0	0	0	0
C. Construction (PHS Facilities)	27,400	14,765	18,100	3,335
subtotal	30,423	18,431	22,035	3,604
PHS Total	$1,301,012	$1,585,878	$1,694,892	$109,014

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

FOOD AND DRUG ADMINISTRATION	FY 1989	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research				
A. Biomedical Research	---	---	---	---
B. Neuroscience & Neuropsychiatric Research	---	---	---	---
C. Behavioral Research	---	---	---	---
D. Therapeutic Agents	---	---	---	---
E. Vaccines	---	---	---	---
F. Research Enhancement	---	---	---	---
subtotal	0	0	0	0
II. Risk Assessment and Prevention				
A. Surveillance	---	---	---	---
B. Population-Based Res: Nat Hist, Trans, Risk Factors.	---	---	---	---
C. Information & Education/Preventive Services	---	---	---	---
1. High Risk or Infected Persons (non-add)	---	---	---	---
2. Special Minority Initiatives (non-add)	---	---	---	---
3. School and College Aged Youth (non-add)	---	---	---	---
4. General Public & Special Programs (non-add)	---	---	---	---
5. Health-Care Workers & Providers (non-add)	---	---	---	---
6. Prevention Capacity Enhancement (non-add)	---	---	---	---
subtotal	0	0	0	0
III. Product Evaluation, Research, and Monitoring				
A. Therapeutic Agents	20,056	19,181	24,760	5,579
B. Vaccines	7,848	9,964	9,688	(276)
C. Diagnostic Reagents and Test Kits	8,284	7,364	10,227	2,863
D. Blood and Blood Products	7,412	11,047	9,150	(1,897)
E. Medical Devices	7,675	8,664	9,411	747
subtotal	51,275	56,220	63,236	7,016
IV. Clinical Health Services Research & Delivery				
A. Services	---	---	---	---
[Drug Subsidy Programs (non-add)	---	---	---	---
B. Pediatric Demonstrations	---	---	---	---
C. Construction	---	---	---	---
D. Research	---	---	---	---
subtotal	0	0	0	0
V. PHS-wide Activities				
A. OASH/NAPO	---	---	---	---
B. Contingency Fund	---	---	---	---
C. Construction (PHS Facilities)	22,500	---	---	---
subtotal	22,500	0	0	0
FDA Total	$73,775	$56,2[illegible]	$63,236	$7,016

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

HEALTH RESOURCES AND SERVICES ADMINISTRATION	FY 1989	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research				
A. Biomedical Research	---	---	---	---
B. Neuroscience & Neuropsychiatric Research	---	---	---	---
C. Behavioral Research	---	---	---	---
D. Therapeutic Agents	---	---	---	---
E. Vaccines	---	---	---	---
F. Research Enhancement	---	---	---	---
subtotal	0	0	0	0
II. Risk Assessment and Prevention				
A. Surveillance	---	---	---	---
B. Population-Based Res: Nat Hist, Trans, Risk Factors.	---	---	---	---
C. Information & Education/Preventive Services	14,640	14,549	21,000	6,451
1. High Risk or Infected Persons (non-add)	---	---	---	---
2. Special Minority Initiatives (non-add)	---	---	---	---
3. School and College Aged Youth (non-add)	---	---	---	---
4. General Public & Special Programs (non-add)	---	---	---	---
5. Health-Care Workers & Providers (non-add)	(14,640)	(14,549)	(21,000)	(6,451)
6. Prevention Capacity Enhancement (non-add)	---	---	---	---
subtotal	14,640	14,549	21,000	6,451
III. Product Evaluation, Research, and Monitoring				
A. Therapeutic Agents	---	---	---	---
B. Vaccines	---	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---	---
D. Blood and Blood Products	---	---	---	---
E. Medical Devices	---	---	---	---
subtotal	0	0	0	0
IV. Clinical Health Services Research & Delivery				
A. Services	33,596	78,809	32,815	(45,994)
[Drug Subsidy Programs (non-add)	[15,000]	[29,606]	---	[-29,606]
B. Pediatric Demonstrations	7,806	14,803	14,735	(68)
C. Construction	3,903	4,342	4,129	(213)
D. Research	---	---	---	---
subtotal	45,305	97,954	51,679	(46,275)
V. PHS-wide Activities				
A. OASH/NAPO	---	---	---	---
B. Contingency Fund	---	---	---	---
C. Construction (PHS Facilities)	---	---	---	---
subtotal	0	0	0	0
HRSA Total	$59,945	$112,503	$72,679	($39,824)

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

INDIAN HEALTH SERVICE	FY 1989	FY 1990 Revised Comm. Action 1/	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Comg Act
I. Basic Science Research				
A. Biomedical Research	---	---	---	---
B. Neuroscience & Neuropsychiatric Research	---	---	---	---
C. Behavioral Research	---	---	---	---
D. Therapeutic Agents	---	---	---	---
E. Vaccines	---	---	---	---
F. Research Enhancement	---	---	---	---
subtotal	0	0	0	0
II. Risk Assessment and Prevention				
A. Surveillance	50	---	95	95
B. Population-Based Res: Nat Hist, Trans, Risk Factors.	---	---	---	---
C. Information & Education/Preventive Services	500	0	650	650
1. High Risk or Infected Persons (non-add)	(50)	---	(50)	(50)
2. Special Minority Initiatives (non-add)	(300)	---	(315)	(315)
3. School and College Aged Youth (non-add)	(50)	---	(50)	(50)
4. General Public & Special Programs (non-add)	(50)	---	(100)	(100)
5. Health-Care Workers & Providers (non-add)	(50)	---	(50)	(50)
6. Prevention Capacity Enhancement (non-add)	---	---	(85)	(85)
subtotal	550	0	745	745
III. Product Evaluation, Research, and Monitoring				
A. Therapeutic Agents	---	---	---	---
B. Vaccines	---	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---	---
D. Blood and Blood Products	---	---	---	---
E. Medical Devices	---	---	---	---
subtotal	0	0	0	0
IV. Clinical Health Services Research & Delivery				
A. Services	250	---	268	268
[Drug Subsidy Programs (non-add)	---	---	---	---
B. Pediatric Demonstrations	---	---	---	---
C. Construction	---	---	---	---
D. Research	---	---	---	---
subtotal	250	0	268	268
V. PHS-wide Activities				
A. OASH/NAPO	---	---	---	---
B. Contingency Fund	---	---	---	---
C. Construction (PHS Facilities)	---	---	---	---
subtotal	0	0	0	0
IHS Total	$800	$0	$1,013	$1,013

1/ Interior Approp. Committee did not provide funds for IHS under the assumption Labor/HHS would provide funds. At this time it has not been determined where the funds will be taken.

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

CENTERS FOR DISEASE CONTROL	FY 1989	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research				
A. Biomedical Research	$6,701	$5,309	$5,522	$213
B. Neuroscience & Neuropsychiatric Research	---	---	---	---
C. Behavioral Research	---	---	---	---
D. Therapeutic Agents	---	---	---	---
E. Vaccines	---	---	---	---
F. Research Enhancement	---	---	---	---
subtotal	6,701	5,309	5,522	213
II. Risk Assessment and Prevention				
A. Surveillance	75,842	87,576	96,758	9,182
B. Population-Based Res: Nat Hist, Trans, Risk Factors	36,149	38,411	44,162	5,751
C. Information & Education/Preventive Services	258,900	311,530	362,661	51,131
1. High Risk or Infected Persons (non-add)	(148,599)	(171,608)	(200,146)	(28,538)
2. Special Minority Initiatives (non-add)	(30,041)	(44,952)	(48,307)	(3,355)
3. School and College Aged Youth (non-add)	(35,419)	(45,617)	(52,527)	(6,910)
4. General Public & Special Programs (non-add)	(33,926)	(38,551)	(46,964)	(8,413)
5. Health-Care Workers & Providers (non-add)	---	---	---	---
6. Prevention Capacity Enhancement (non-add)	(10,915)	(10,802)	(14,717)	(3,915)
subtotal	370,891	437,517	503,581	66,064
III. Product Evaluation, Research, and Monitoring				
A. Therapeutic Agents	---	---	---	---
B. Vaccines	---	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---	---
D. Blood and Blood Products	---	---	---	---
E. Medical Devices	---	---	---	---
subtotal	0	0	0	0
IV. Clinical Health Services Research & Delivery				
A. Services	---	---	---	---
[Drug Subsidy Programs (non-add)	---	---	--	---
B. Pediatric Demonstrations	---	---	---	---
C. Construction	---	---	---	---
D. Research	---	---	---	---
subtotal	0	0	0	0
V. PHS-wide Activities				
A. OASH/NAPO	---	---	---	---
B. Contingency Fund	---	---	---	---
C. Construction (PHS Facilities)	---	---	---	---
subtotal	0	0	0	0
CDC Total	$377,592	$442,826	$509,103	$66,277

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

NATIONAL INSTITUTES OF HEALTH	FY 1989	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research				
A. Biomedical Research	$148,689	$170,546	$180,061	$9,515
B. Neuroscience & Neuropsychiatric Research	16,645	20,324	21,669	1,345
C. Behavioral Research	5,178	4,799	5,172	373
D. Therapeutic Agents	235,261	303,678	326,388	22,710
E. Vaccines	59,819	78,633	86,130	7,497
F. Research Enhancement	11,413	8,253	9,445	1,192
subtotal	477,005	586,233	628,865	42,632
II. Risk Assessment and Prevention				
A. Surveillance	7,206	8,263	8,981	718
B. Population-Based Res: Nat Hist, Trans, Risk Factors	100,736	117,935	128,034	10,099
C. Information & Education/Preventive Services	12,447	16,336	17,784	1,448
1. High Risk or Infected Persons (non-add)	(2,779)	(2,701)	(2,796)	(95)
2. Special Minority Initiatives (non-add)	---	---	---	---
3. School and College Aged Youth (non-add)	(533)	(668)	(716)	(48)
4. General Public & Special Programs (non-add)	(7,026)	(10,554)	(11,666)	(1,112)
5. Health-Care Workers & Providers (non-add)	(2,109)	(2,413)	(2,606)	(193)
6. Prevention Capacity Enhancement (non-add)	---	---	---	---
subtotal	120,389	142,534	154,799	12,265
III. Product Evaluation, Research, and Monitoring				
A. Therapeutic Agents	---	---	---	---
B. Vaccines	---	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---	---
D. Blood and Blood Products	---	---	---	---
E. Medical Devices	---	---	---	---
subtotal	0	0	0	0
IV. Clinical Health Services Research & Delivery				
A. Services	---	---	---	---
[Drug Subsidy Programs (non-add)	---	---	---	---
B. Pediatric Demonstrations	---	---	---	---
C. Construction	---	---	---	---
D. Research	---	---	---	---
subtotal	0	0	0	0
V. PHS-wide Activities				
A. OASH/NAPO	---	---	---	---
B. Contingency Fund	---	---	---	---
C. Construction (PHS Facilities)	4,900	14,765	16,500	1,735
subtotal	4,900	14,765	16,500	1,735
NIH Total	$602,294	$743,532	$800,164	$56,632

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION	FY 1989	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research				
A. Biomedical Research	$13,118	$22,101	$27,339	$5,238
B. Neuroscience & Neuropsychiatric Research	10,363	16,524	19,114	2,590
C. Behavioral Research	107,192	120,695	120,717	22
D. Therapeutic Agents	---	---	---	---
E. Vaccines	---	---	---	---
F. Research Enhancement	2,307	4,338	5,675	1,337
subtotal	132,980	163,658	172,845	9,187
II. Risk Assessment and Prevention				
A. Surveillance	1,616	4,300	5,000	700
B. Population-Based Res: Nat Hist, Trans, Risk Factors.	15,500	21,607	25,020	3,413
C. Information & Education/Preventive Services	13,295	14,142	14,704	562
1. High Risk or Infected Persons (non-add)	(651)	(950)	(986)	(36)
2. Special Minority Initiatives (non-add)	---	---	---	---
3. School and College Aged Youth (non-add)	---	---	---	---
4. General Public & Special Programs (non-add)	(3,535)	(3,620)	(3,685)	(65)
5. Health-Care Workers & Providers (non-add)	(9,109)	(9,572)	(10,033)	(461)
6. Prevention Capacity Enhancement (non-add)	---	---	---	---
subtotal	30,411	40,049	44,724	4,675
III. Product Evaluation, Research, and Monitoring				
A. Therapeutic Agents	---	---	---	---
B. Vaccines	---	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---	---
D. Blood and Blood Products	---	---	---	---
E. Medical Devices	---	---	---	---
subtotal	0	0	0	0
IV. Clinical Health Services Research & Delivery				
A. Services	8,945	8,940	8,446	(494)
[Drug Subsidy Programs (non-add)	---	---	---	---
B. Pediatric Demonstrations	---	---	---	---
C. Construction	---	---	---	---
D. Research	1,000	2,000	2,054	54
subtotal	9,945	10,940	10,500	(440)
V. PHS-wide Activities				
A. OASH/NAPO	---	---	---	---
B. Contingency Fund	---	---	---	---
C. Construction (PHS Facilities)	---	---	1,600	1,600
subtotal	0	0	1,600	1,600
ADAMHA Total	$173,336	$214,647	$229,669	$15,022

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

ADMINISTRATION FOR HEALTH CARE POLICY AND RESEARCH	FY 1989	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research				
A. Biomedical Research	---	---	---	---
B. Neuroscience & Neuropsychiatric Research	---	---	---	---
C. Behavioral Research	---	---	---	---
D. Therapeutic Agents	---	---	---	---
E. Vaccines	---	---	---	---
F. Research Enhancement	---	---	---	---
subtotal	0	0	0	0
II. Risk Assessment and Prevention				
A. Surveillance	---	---	---	---
B. Population-Based Res: Nat Hist, Trans, Risk Factors.	---	---	---	---
C. Information & Education/Preventive Services	---	---	---	---
1. High Risk or Infected Persons (non-add)	---	---	---	---
2. Special Minority Initiatives (non-add)	---	---	---	---
3. School and College Aged Youth (non-add)	---	---	---	---
4. General Public & Special Programs (non-add)	---	---	---	---
5. Health-Care Workers & Providers (non-add)	---	---	---	---
6. Prevention Capacity Enhancement (non-add)	---	---	---	---
subtotal	0	0	0	0
III. Product Evaluation, Research, and Monitoring				
A. Therapeutic Agents	---	---	---	---
B. Vaccines	---	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---	---
D. Blood and Blood Products	---	---	---	---
E. Medical Devices	---	---	---	---
subtotal	0	0	0	0
IV. Clinical Health Services Research & Delivery				
A. Services	---	---	---	---
[Drug Subsidy Programs (non-add)	---	---	---	---
B. Pediatric Demonstrations	---	---	---	---
C. Construction	---	---	---	---
D. Research	6,831	8,474	10,505	2,031
subtotal	6,831	8,474	10,505	2,031
V. PHS-wide Activities				
A. OASH/NAPO	---	---	---	---
B. Contingency Fund	---	---	---	---
C. Construction (PHS Facilities)	---	---	---	---
subtotal	0	0	0	0
HCPR Total	$6,831	$8,474	$10,505	$2,031

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH	FY 1989	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research				
A. Biomedical Research	---	---	---	---
B. Neuroscience & Neuropsychiatric Research	---	---	---	---
C. Behavioral Research	---	---	---	---
D. Therapeutic Agents	---	---	---	---
E. Vaccines	---	---	---	---
F. Research Enhancement	---	---	---	---
subtotal	0	0	0	0
II. Risk Assessment and Prevention				
A. Surveillance	---	---	---	---
B. Population-Based Res: Nat Hist, Trans, Risk Factors.	---	---	---	---
C. Information & Education/Preventive Services	3,416	4,010	4,588	578
1. High Risk or Infected Persons (non-add)	---	---	---	---
2. Special Minority Initiatives (non-add)	(3,416)	(4,010)	(4,588)	(578)
3. School and College Aged Youth (non-add)	---	---	---	---
4. General Public & Special Programs (non-add)	---	---	---	---
5. Health-Care Workers & Providers (non-add)	---	---	---	---
6. Prevention Capacity Enhancement (non-add)	---	---	---	---
subtotal	3,416	4,010	4,588	578
III. Product Evaluation, Research, and Monitoring				
A. Therapeutic Agents	---	---	---	---
B. Vaccines	---	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---	---
D. Blood and Blood Products	---	---	---	---
E. Medical Devices	---	---	---	---
subtotal	0	0	0	0
IV. Clinical Health Services Research & Delivery				
A. Services	---	---	---	---
[Drug Subsidy Programs (non-add)	---	---	---	---
B. Pediatric Demonstrations	---	---	---	---
C. Construction	---	---	---	---
D. Research	---	---	---	---
subtotal	0	0	0	0
V. PHS-wide Activities				
A. OASH/NAPO	3,023	3,666	3,935	269
B. Contingency Fund	---	---	---	---
C. Construction (PHS Facilities)	---	---	---	---
subtotal	3,023	3,666	3,935	269
OASH Total	$6,439	$7,676	$8,523	$847

PEDIATRIC AIDS

Mr. NATCHER. How much is included in the Public Health Service budget for various programs directed at pediatric AIDS patients in 1991, and how does this compare to spending on this problem in 1989 and 1990?

Dr. Mason, I have received probably more letters here than on any other point now as far as AIDS is concerned. I have had people talk to me more about it. We have had a number of outside witnesses right here in this category.

Where are we, Dr. Mason?

Dr. MASON. Pediatric AIDS is a very important area. We know that increasing numbers of babies and children are infected. As a result of that, in the 1990 budget, we have specifically targeted at pediatric AIDS a total of $125,531,000. In the 1991 budget there is $154,622,000. I am talking about monies that are specifically targeted for pediatric AIDS but I have to say all the other money, the $1,700,000,000, requested directly or indirectly, almost always has some effect upon pediatric AIDS.

When we do biomedical research, if we discover a vaccine or a cure, obviously, it is going to enhance the quality of life for babies and children. Such is also true in our surveillance and prevention activities and our education activities. There will be $154,622,000 specifically targeted where the direct effect is pediatric AIDS in the 1991 budget.

Mr. NATCHER. Dr. Mason, are there further steps that we should be taking in the area of pediatric AIDS other than what we are doing?

Dr. MASON. Yes there are. We need to enhance our activities in the field of making drugs available for babies and children. This is a little more difficult because of safety and research requirements.

I think we can do better in getting drugs available sooner during the IND phase. I think we ought to be willing to give babies and children opportunities to receive these drugs under safe conditions.

I would say the therapeutic area is another area where we can do more. I want to report to you that our new Surgeon General, Dr. Antonia Novello, now that she has been confirmed, and Dr. Jim Allen will co-chair a new subcommittee in the Public Health Service on pediatric AIDS.

Their job is to identify every area where we should be taking more vigorous activity with regard to not only babies and children but women.

That is an area we want to concentrate on.

Mr. NATCHER. Mr. Conte, I will yield to you.

NATIONAL COMMISSION ON ORPHAN DISEASES

Mr. CONTE. Dr. Mason, you just signed off on the interim report on the National Commission on Orphan Diseases. It looks to me like just a two-page memo. Is this a sign of the low priority you are placing on orphan diseases? What is the status of the report?

Dr. MASON. It is not a sign of low priority on orphan disease or orphan drugs. I am personally authorizing the board to assist me in a review and help us to look carefully at a report from the National Commission on Orphan Diseases. I last chaired a board meeting on February 13.

We are now moving ahead with an extended review of the National Commission on Orphan Diseases report and what we are doing within the Public Health Service.

We expect to complete this work by May of 1990. So I think you will see more than a couple of pages in the immediate future. We are beginning to take actions along the lines of the recommendations that have come from the National Commission, a new coordinator for rare diseases activities has been appointed in the Office of the Director of the National Institutes of Health.

We are developing plans to design a system to modify NIH and ADAMHA grants which are related to rare diseases. We are holding a special workshop in May to determine the feasibility to do a better job of determining the incidence and prevalence of rare diseases.

At the Food and Drug Administration we are conducting educational programs for product review, so that personnel within FDA are alert to the unique problems of the orphan diseases. We are looking within FDA at the regulatory requirements for sponsors of products for rare diseases.

I think there is a lot of activity going on. It is an important area. It is not insignificant to me.

Mr. CONTE. I am glad to hear that. What is the hold up? It was supposed to be done in early March. Now you just tell me a final report will be in in May. Has it been OMB holding you up?

Dr. MASON. No, I cannot blame anybody but myself and the process.

Mr. CONTE. That is fair enough.

The interim report states the Public Health Service has already begun to implement many of the recommendations in the Commission's report. Please provide for the record a list of the recommendations which you have begun to implement and a list of those that you are currently planning to implement.

Dr. MASON. We will be happy to.

[The information follows:]

RESPONSE TO BUDGET HEARINGS

Re: Orphan Disease Commission Recommendations

Following are two lists of recommendations to PHS from the National Commission on Orphan Diseases, as requested by Mr. Conte. The first list includes those recommendations which PHS has begun to implement. The second list includes those which PHS is currently planning to implement. It should be noted that several of the recommendations are quite complex, and inclusion on these lists may reflect the status of part, but not all, of the recommendation's content. It should also be noted that portions of the continued or planned implementation may be dependent upon receipt of additional funds.

I. Recommendations which the Public Health Service has begun to implement:

Recommendation 13. The Federal Government should provide appropriate funding for registries of scientific and technical data for rare diseases.

Recommendation 14. Federal agencies should heighten their awareness of rare diseases. They should declare activities regarding rare diseases to be a high priority of their program.

Recommendation 15. Funding agencies should ensure that study sections include experts on the rare disease under consideration. When these experts are *ad hoc* reviewers, they should be allowed to vote on the application.

Recommendation 16. Funding agencies should ensure that advisory councils have representatives from patient and family groups who understand the problems associated with rare diseases.

Recommendation 18. Criteria used in evaluating GCRCs should emphasize the rare disease research programs conducted or proposed.

Recommendation 19. Voluntary organizations, foundations, and Federal agencies should continue to co-sponsor workshops and symposia to attract new and experienced investigators and to stimulate new research hypothesis.

Recommendation 24. The National Center for Health Statistics should determine the prevalence of rare diseases in the United States.

Recommendation 32. The FDA Office of Orphan Products Development should establish a program to act as a resource and assist investigators with promising orphan products to gain access to reference Drug Master Files and to obtain a sponsor.

Recommendation 37. The FDA's Office of Orphan Products Development, in conjunction with the pharmaceutical industry, schools of pharmacy, and existing consortia, should develop and implement a system to help investigators develop appropriate dosage forms.

Recommendation 38. The FDA should develop and conduct an educational program for its product review personnel regarding problems unique to the development of products for rare diseases.

Recommendation 39. The FDA should maintain appropriate flexibility with respect to regulatory requirements for the approval of orphan products, especially with respect to protocol design and the number and kinds of preclinical and clinical studies.

Recommendation 41. The FDA should expedite orphan product approval by:

c. encouraging the sponsor to develop draft labeling and seek inspection of their manufacturing facilities at earlier stages of development.

Recommendation 42. If FDA institutes user fees for the NDA review process, FDA should waive any such fees for orphan products, where appropriate.

Recommendation 46. The FDA should expedite and encourage the addition of new rare disease indications to the labeling of marketed products.

Recommendation 49. NIH, ADAMHA, and FDA should inform investigators involved in orphan products development and seeking financial support from Federal agencies of the potential usefulness of the SBIR program.

Recommendation 50. Federal employees should be encouraged to use the incentives of the Federal Technology Transfer Act of 1986 to bring their products to the marketplace, and Federal agencies should make available as rapidly as possible the intellectual property of employees and agencies.

Recommendation 52. Federal agencies and the private sector should inform clinical investigators of rare diseases of the protocol assistance available from the FDA. Investigators should ensure that their clinical study protocols meet FDA requirements for adequate, well-controlled studies.

II. Recommendations which PHS is currently planning to implement:

Recommendation 20. **All government agencies conducting or funding rare disease research should have a mechanism for identifying and monitoring such activities. Resulting data should be provided to Congress annually.**

Recommendation 53. **The FDA, ADAMHA, and NIH should ensure that grant applications which cannot be funded by one agency are forwarded to the others for consideration.**

Mr. CONTE. The interim report says a new coordinator for rare diseases activities has been appointed at NIH. The commission's report calls for the establishment of an office for rare orphan diseases. Is that true?

Dr. MASON. Yes.

Mr. CONTE. And a coordinator has been appointed?

Dr. MASON. Yes, a coordinator has been appointed at NIH. We are trying to carry out as many of the commission recommendations as we feel are feasible. Many of them are going to be.

ADOLESCENT FAMILY LIFE

Mr. CONTE. The Adolescent Family Life Program is the only federal program tackling the problems of adolescent pregnancy and parenting. The Brightside program in my district has done a terrific job in helping very high-risk teens, educating them about the responsibilities of parenthood, and reaching out into the community. Barbara Bush and I toured Brightside last fall, and both of us were impressed with how well they are working with these young people. Maybe I will get you up there one of these days.

Dr. MASON. I will be glad to do that.

Mr. CONTE. Isn't there a need for projects such as Brightside in other areas like this?

Dr. MASON. I agree that the Adolescent Family Life Program is very important. It has both a prevention side where we try to assist teenagers in abstaining or delaying sexual activity and a care side, which enables groups such as you've described to work with the pregnant teenager or the teenager with her baby. By funding research in teenage pregnancy and providing these services, I think we are helping a group of young people in the United States and we need to continue this activity.

Mr. CONTE. What else can be done to reduce it?

Dr. MASON. I will turn to Nabers Cabaniss who directs our activities that relate to teenage pregnancy.

Miss CABANISS. We have two programs that are specifically targeted at prevention, one is the Adolescent Family Life program and the other is the Title X Family Planning program.

There is a big difference in dollars. Adolescent Family Life is a $9,400,000 program and the Family Planning is a $139 million program. In Title X about one-third of the clients are teenagers.

Mr. CONTE. I know all of that. What are we doing to prevent it? You must have some ideas. I have some I will tell you.

Miss CABANISS. There are a couple of different approaches. The first line of defense is encouraging teens not to be sexually active and the second is for them to be involved in a monogamous relationship. The Family Planning Program is working with teenagers who are sexually active to help them be better contraceptive users.

All these approaches will be only successful to the extent they involve the family. Part of what we are working with in Title X and the Adolescent Family Life Program is helping parents to do a better job in guiding their teenagers through the rough teen years and helping them to delay sexual activity.

Mr. CONTE. I have a city called Holyoke in my district. We have some outstanding records in that city, the highest drop out rate in the state, the highest teenage pregnancy in the state. We had the highest infant mortality rate in the state.

We got that turned around.

Now we have talked to people who are interested in putting together a program which has me all excited. That is at Mt. Holyoke College, the president came to see me, to take over an old vocational school, the Dean Vocational School and make it a middle school and get 230 of these young ladies in this school.

They will go to school between 7:30 and 5:30 in the afternoon. After 3 o'clock in the afternoon the regular teachers will go home and we will draw students from the five college areas to come in and tutor them on a one-on-one basis. This is not just scholastic tutoring, we are going to do some other tutoring, too.

Then as we move along and get some more money, we are going to build dormitories so they can sleep there at night. We have something working here.

It has not started yet. But I think we have an idea here at least that can blossom out and it might be the thing that will take these people off the cycle of welfare.

I want you to look into that. Those are the ideas we have to come up with. We can't keep using those old ideas.

Miss CABANISS. I would say that sounds like a great applicant for an Adolescent Family Life grant. The teenager has to get help finding her sense of self worth, the fact that she can do something with her life. If she is not getting enough support at home, we can bring in outside individuals to help her see that there is a better way.

Mr. CONTE. I think it has promise. At least it is something different from what we have been doing and not getting anywhere.

Are you involved with other projects at CDA, HRSA and NIH that look at pregnancy, Dr. Mason?

ADOLESCENT PREGNANCY

Dr. MASON. There are a number of programs that are involved in pregnancy. At HRSA we have the maternal and child health block grant. One of our grave concerns is the high infant mortality rate in the United States, the problem of low birth rate and teenagers having babies.

Certainly that is one of the problems that we need to work with if we are going to solve the high infant mortality rate. I think the maternal and child health and the preventive health block grants provide assistance. Also the epidemiological studies that CDC is carrying out in places like Mississippi to identify risk factors and how we can reverse those and the community of migrant health centers that are pinpointing that kind of activity also provide assistance.

I want to mention that the Health Care Financing Administration through Medicaid also has moneys that are available to help in this area. I think we have a lot of resources in the Department that are assisting in doing something about the problem. We all recognize this is a major area where we need to be focusing.

I think what you are talking about is providing a home where a home does not exist otherwise and giving a girl who has had a problem, who is in the process of resolving the problem the stability where she can continue her education, can learn parenting skills, learn the skills of independence.

More and more we recognize whether it is drug abuse or teenage pregnancy we are dealing with, you have to get to the foundation of this.

It is not just the medical problem. It is a social problem. There are a number of home morbidities. We see alcohol, drug abuse, mental health problems as well. Ultimately, if we are going to succeed, it will not be through categorical approaches to problems that are broad-based. I think the solutions are going to have to be able to encompass both the medical and social problems.

MEDICAL TREATMENT EFFECTIVENESS PROGRAM

Mr. CONTE. I am pleased to hear you say that. Dr. Clinton, last year Dr. Sullivan called me up on the importance of the Medical Treatment Effectiveness program.

He called it a top priority for HHS. The budget is requesting $48,000,000 in outlays for this program. What efforts are being made to involve other PHS agencies in looking at Medical Effectiveness?

Dr. CLINTON. We are indeed working with every PHS agency to explore the opportunities. With HRSA, we have already entered into an agreement to look at some educational programs as conduits for research findings and guideline development. One is with the AHEC program that you are familiar with and another with the geriatric centers. Most of this information will be relevant to the geriatric centers.

With regard to CDC, we are talking to them about a community approach to the management of diabetes complications. In addition, I talked extensively yesterday with the Indian Health Service to identify an activity in which we might engage. In looking at their health system for areas where we might target effectiveness research, we found that diabetes management is a major problem in the Indian Health Service community.

With NIH we have done a number of things already together. For example, we have worked with the National Center for Nursing Research on nursing guidelines. Last week I spoke with Dr. Frank Williams, the Director, on some activities to focus on Alzheimer's Disease. We also have worked with ADAMHA with regard to guidelines for depression. They have a great deal of research already available in the ADAMHA accounts. It is unlikely that we would need to supplement that research but on guidelines development (which is the end result of outcomes research), there is a real opportunity.

The very notable new piece of work is with the National Library of Medicine. You may be aware that health services research and technology assessment has not been completely documented in the electronic systems of the National Library of Medicine. The Director of the Library, Dr. Lindberg, has been very responsive. That could be the focus for all that is going on in the nation today, as well as the things that we are trying to direct.

I have talked also with the FDA. They are predominantly, as you well know, a regulatory agency. However, the people involved in our technical discussions on various issues came up with one potential issue. That is in regard to imaging and some of the chemicals we use to take x-rays. There is a debate as to what might be more effective.

We do work collaboratively in discussing the issues. These are examples of the activities we have gotten underway in the last six months and I would expect that level of effort to be sustained. With our colleagues in HCFA, we are in the final stages of a major transfer of funds on the data development component of the Medical Treatment Effectiveness Program. I think the Department has a good record of collaboration both across the Department and, certainly, within the Public Health Service.

Mr. **Conte**. Thank you, Mr. Chairman.

NATIONAL SURVEY OF SEXUAL BEHAVIOR

Mr. **Natcher**. Dr. Mason, as you will recall, in last year's budget the Department requested funds for a large scale national survey of sexual behavior. The committee did not approve that request and asked you to reconsider this matter.

Where does this matter stand at the present time? Are you still sold on it, Dr. Mason?

Dr. **Mason**. Mr. Chairman, Jim Mason is still sold on it.

Mr. **Natcher**. Tell us why, Dr. Mason.

Dr. **Mason**. I think we need the information.

Mr. **Natcher**. From the standpoint of what, AIDS or other matters? Are you going to go door to door inquiring about sexual behavior?

Dr. **Mason**. We will go door to door only if we get your permission because we don't have funding without your help. First of all, I want to put this in the context of AIDS, yes, it is an AIDS sexual behavior study, not a Kinsey report. It is going to be very narrow to this epidemic disease that is confronting our nation and the world.

We cannot make accurate projections as to how many are infected. We cannot well target our educational programs without having more information about what people are doing out there.

I think it is like an ostrich with its head in the sand. Yes, we can get out general information. We sent a brochure to every home in the United States. But our efforts now have to be guided by targeting particular groups engaged in high risk behavior. We talk about groups but we are not sure what happens to a woman when she is divorced. In fact there are transitional changes in a person's life where they are not at risk and then suddenly they are at risk for a year or two and then they are not at risk anymore.

I hope I am not wrong but I think we can design a survey that will not be intrusive. We hope we can put skip areas into it so when they are talking to a man or woman who have had no or little sexual experience they will not be asked the same questions as the person who has had a lot of sexual experiences.

We hope we can put together something that will convince Congress it ought to be funded.

Mr. Natcher. Have you requested funds in the 1991 Public Health Service budget for such a survey?

Dr. Mason. No.

AGENCY FOR HEALTH CARE POLICY AND RESEARCH

Mr. Natcher. As you have pointed out, Dr. Mason, the Agency for Health Care Policy and Research was established in last year's reconciliation act. What is the total budget for this agency from all sources in 1990 and 1991?

Dr. Mason. The agency 1991 budget request is $110,200,000 which represents an increase of $11,400,000 over fiscal year 1990.

The increase from all sources includes a $23,000,000 increase in transfers from the medicare trust funds which is offset by a $10,600,000 decrease in general fund appropriations, a $700,000 decrease in PHS 1 percent evaluation fund, and a three-tenths of 1 percent decrease in the National Research Service awards funding.

So we have a very complex system of budget authority, Medicare trust funds and then 1 percent evaluation fund from the Public Health Service agencies.

All of that goes together to give the total budget of $110,200,000. We would be happy to provide tabular material on where that money is derived from.

[The information follows:]

AGENCY FOR HEALTH CARE POLICY AND RESEARCH

[Detail of program funding sources, in thousands of dollars]

	Fiscal year—		Plus or minus
	1990	1991	
Budget authority	$49,768	$39,126	−$10,642
Medicare trust funds	6,037	29,037	+23,000
1 percent PHS evaluation funds	41,443	40,776	−667
NRSA funds	1,590	1,300	−290
Total	98,838	110,239	+11,401

Mr. Natcher. Doctor, are you able to effectively spend that large amount, an increase in one year from about $50,000,000 in 1989 to about $99,000,000 in 1990?

Dr. Mason. You see, in President Bush's 1990 budget he asked for $52,000,000 an increase of $46,100,000 over FY 1989 for Medical Effectiveness Research.

We did not get everything that was in the Bush budget. When I think of the $600,000,000,000 that is being spent for health care services in the United States of America, 11.5 percent of our GNP, that is a pittance in the context of what ought to be spent to find out, first of all, what works and how we can make our system more effective. My answer is, yes, we can readily spend what we hope will be available in the Bush 1991 budget.

ONE PERCENT EVALUATION FUNDS

Mr. Natcher. As we understand the funding for this new agency, it is financed in large part through automatic transfers from the Public Health Service evaluation funds. What effect will this have on other agencies in the Public Health Service, such as the National Institutes of Health?

Dr. Mason. Let me talk generically about those transfers from the 1 percent evaluation funds. It is not just the new agency that is causing significant problems. When we look at total evaluation funding and transfer, in 1989 it was $49,200,000. In 1990 it is $83,800,000 or an increase of $34,100,000.

In the budget request for 1991, it will go up to $84,500,000. That is just an increase of $1,200,000. The problem is that we are using a very peculiar type of funding mechanism to do a lot of things within the Public Health Service.

You have the new agency, which is to be funded up to a maximum of 40 percent of the 1 percent evaluation fund. The National Center for Health Statistics also is being funded by the 1 percent evaluation funds. Some of the NCHS surveys are being funded that way and then we are doing our own evaluation. So we are really talking about a transfer, as I said, of $84,500,000. When we break that down by agency and you take NIH, for all of these there will be an increase of $20,000,000 levied against NIH. This will result in approximately 100 grants not being funded; ADAMHA, this will be a transfer of $5,200,000 or approximately 25 grants will not be funded, HRSA an increase of $3,600,000 and an additional increase in awards to 15 to 20 centers will not be made. CDC, it is a transfer of $2,600,000 so program evaluations for STDs and immunization will be curtailed and grant support for measles and hepatitis B prevention will be decreased.

You can see it has a very significant effect on PHS programs.

Mr. Natcher. Mr. Conte, do you have any additional questions?

PEER REVIEW PROCESS

Mr. Conte. Dr. Clinton, with your other activities I think your agency ought to be looking at the peer review process. I know there has been criticism of the agency's own process. I am also concerned about peer review overall. Peer review is the linchpin on the scientific grant making process at NIH and ADAMHA. While it is one of the better systems around, peer review is still flawed and vulnerable to conflicts of interest, particularly for highly specialized fields where the community of peers is very narrow.

You are seeing situations where one expert can block the publication of a competitor's article. I think your agency would be the perfect shop to take a close look at this problem.

Do you think the peer review process ought to be reexamined to find ways to improve it?

Dr. Clinton. That is a very broad question.

Mr. Conte. Do you want time to think about it?

Dr. Clinton. I will take that opportunity to give the process careful thought. We will give you a comprehensive response.

[The information follows:]

Peer Review Process

The Agency for Health Care Policy and Research (AHCPR) recently undewent an audit of its grants management process, including peer review. The results of that audit revealed that the committee-based peer review process, based on the NIH model and administered by AHCPR, is basically sound and free of significant problems.

The peer review process for reviewing research grant proposals is not perfect, built has a history of excellence within the Public Health Service (PHS). The AHCPR (previously the National Center for Health Services Research and Health Care Technology Assessment (NCHSR)) reviewed 236 grant applications in FY 1989. The issue of bias in peer review is of concern to all of us, and we work to avoid instances where one scientist could unfairly impede another's research through the peer review process. In the end, any mechanism of review will remain a human process, and we can only work to keep bias to an insignificant level. Integrity aside, the scientific community shows an amazing commitment to the rigor of scientific method, and that commitment to recognize promising research where it exists tends to counteract concerns such as career advancement, professional jealously, and financial gain. Our charge is to be scrupulous and diligent in avoiding placing reviewers in conflicted situations. We do this by keeping our advisory committees broadly representative and multidisciplinary, involving numerous reviewers on each proposal, removing conflicted reviewers from the review process, and letting our reviewers know we take a strong position on avoiding real and apparent conflict of interest.

Mr. CONTE. I will submit the balance of my questions for the record and the proper witnesses can answer the questions.

Dr. MASON. We will be delighted to attend to that.

Mr. NATCHER. Dr. Mason, we want to thank you and your associates for appearing before our committee at this time on behalf of your budget request for fiscal year 1991.

It has been a good hearing. Thank you very much. The committee will now recess until 2 o'clock.

[The following questions were submitted to be answered for the record:]

EVALUATION OF AIDS ACTIVITIES

Mr. Natcher: The Centers for Disease Control and other agencies are spending large sums of money each year for AIDS prevention and education activities, including media campaigns, etc. Your 1991 request for this is over $400 million, I believe. What evaluation have you done to see whether this money is achieving its purposes? Are we on the right track, in your opinion?

Dr. Mason: CDC's HIV prevention and education activities have historically been directed primarily to individuals infected or at increased risk, school- and college-aged youth, and the general public. CDC estimates that it spends approximately 10 percent of its HIV program funds to evaluate HIV prevention activities.

There are considerable data to suggest that HIV prevention and education activities are having an effect:

- Results of 38 studies on HIV counseling and testing indicate that risk behaviors can be decreased through these intervention efforts. All six studies on intravenous drug users show decreases in risky injection practices while the 23 studies on homosexual men show decreases in high risk behaviors for both seropositive and seronegative men. Other studies show increased condom use among infected individuals who know their antibody status.
- Since 1985, approximately 2.5 million HIV tests have been performed in public sites through September 30, 1989, and 149,639 of those tests were positive. This represents an estimated 123,000-145,000 individuals found to be infected with HIV.
- Reports of decreases in syphilis and gonorrhea in gay men continue to reflect safer sexual behavior among this population.
- Preliminary data from 11 States indicate that an average of 90 percent of their schools provide some form of HIV education.
- Surveys indicate that public awareness is high and misunderstanding about transmission (a potential source of discrimination) has declined since the National Public Information Campaign was launched in 1987.
- Expanded demand for information continues. The National AIDS Hotline receives approximately 21,000 calls a week while the National AIDS Clearinghouse responds to requests to distribute over 1 million documents a week.

GENERAL HEALTH SERVICES RESEARCH

Mr. Natcher: Give us a little better idea as to how you are spending the $14 million increase from 1989 to 1990 for general health services research, an increase of 40%.

Dr. Mason: In FY 1989, research activities conducted through the National Medical Expenditures Survey and the Hospital Studies Program were supported both by general budget authority funds and PHS one percent evaluation funds made available to the National Center for Health Services Research and Health Care Technology Assessment (NCHSR). In FY 1990, the National Medical Expenditures Survey is supported completely by PHS one percent evaluation funds as provided in P.L. 101-166, the Labor/HHS FY 1990 Appropriations

Act. This offsetting change is reflected in the table which follows.

General Health Services Research
($000)

Source of Funds	FY 1989 Actual	FY 1990 Approp	Increase/ Decrease
Budget Authority	$16,765	$12,161	- $4,604
Medicare Trust Funds	1,034	1,037	+ 3
1% Eval (NMES/HSP)	10,033	14,681	+ 4,648
1% Eval (Other)	6,986	21,064	+ 14,078
NRSA	1,323	1,590	+ 267
Total	$36,141	$50,533	+$14,392

The $14 million increase in FY 1990 in additional PHS one percent evaluation funding for general health services reflects enactment of the Omnibus Budget Reconciliation Act of 1989, P.L. 101-239. Section 926(b) of the PHS Act makes available to the Agency for Health Care Policy and Research 40 percent of the maximum amount authorized in section 2611 (relating to PHS evaluation funds) of the PHS Act. In FY 1989, the authorizing legislation for the former National Center for Health Services Research and Health Care Technology Assessment (NCHSR) made only 7.5 percent of the maximum amount authorized in section 2611 available to NCHSR.

In FY 1990, the Agency for Health Care Policy and Research will use these additional resources to fund evaluative health services research in such areas as:

- o Minority Health Issues
- o Medical Liability
- o Rural Health Research
- o Primary Care and Health Promotion/Disease Prevention
- o Uninsured and Underinsured

CREATION OF NEW AGENCY FOR HEALTH CARE POLICY AND RESEARCH

Mr. Natcher: Did the Department recommend the creation of this new agency, or was this a Congressional initiative?

Dr. Mason: The Agency for Health Care Policy and Research was established with enactment of the Omnibus Budget Reconciliation Act of 1989 (Public Law 101-239), on December 19, 1989. The purpose of the Agency is to enhance the quality, appropriateness, and effectiveness of health care services, and access to such services. This will be accomplished through the establishment of a broad base of scientific research and through the promotion of improvements in clinical practice and in the organization, financing, and delivery of health care services. The Agency succeeds the National Center for Health Services Research and Health Care Technology Assessment which was previously included in the Office of the Assistant Secretary for Health.

On June 16, 1989, I testified before the House Energy and Commerce Subcommittee on Health on H.R. 2601, Mr. Waxman's bill on medical effectiveness research. At that time, I pointed out that the bill's provisions for establishment of a new departmental entity for effectiveness research were generally consistent with the Administration's plans to reorganize the National Center for Health Services Research to undertake the comprehensive evaluation of clinical studies and dissemination of those findings. I noted, however, that the activities authorized by the proposed bill could have been carried out under our then current authorities. We urged the Subcommittee not to limit our flexibility to organize our staff and related resources to achieve the best programmatic outcomes.

The primary purpose of my proposal to reorganize the National Center for Health Services Research and Health Care Technology Assessment (NCHSR) was to implement the Secretary's Medical Treatment Effectiveness Program (MEDTEP) in accordance with Congressional goals. With the passage of P.L. 101-239, our efforts to administratively meet this objective has given way to implementing the organizational requirements of the new law.

Formal transfer documents and an organizational structure for the new Agency were approved and signed by the Secretary on March 26, 1990.The Secretary will appoint an Administrator for the Agency. Dr. J. Jarrett Clinton was designated Acting Administrator of the Agency on December 27, 1989.

EVALUATION STUDIES

Mr. Natcher: Can you tell us how much has been spent traditionally on evaluation studies at the Department and how this changes in 1990 and 1991 under the new financing arrangement?

Dr. Mason: The following table reflects amounts that have been or plan to be spent for evaluation studies.

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Asst. Secretary for Planning and Evaluation/OS......	$6,000,000	$6,860,000	$6,860,000
Office of Asst. Secretary for Health...	3,150,000	3,000,000	3,000,000
PHS Agencies.........	10,800,000	13,800,000	13,800,000
Total.........	$19,950,000	$23,660,000	$23,660,000

As a result of the increased funding which is required to be provided out of the one percent evaluation set aside to support programmatic functions of the Agency for Health Care Policy and Research, some individual evaluation projects may be curtailed. However, total evaluation activities for PHS programs will increase by $3.7 million in FY 1990.

Mr. Natcher: Doctor, in your view, would it be better to finance this new agency through direct appropriations rather than through taps of Public Health Service evaluation funds?

Dr. Mason: The Omnibus Budget Reconciliation Act of 1989, P.L. 101-239, makes available to the newly established Agency for Health Care Policy and Research (AHCPR) 40 percent of the maximum amount authorized in section 2611 (relating to use of evaluation funds) of the Public Health Service (PHS) Act. In FY 1990, this represents a total of $41.4 million to be made available to AHCPR.

The directed use of PHS one percent evaluation funds by congressional mandate to support activities in health services research and health statistics is not a new phenomenon. For example, in FY 1989, the precursor to AHCPR (the former National Center for Health Services Research and Health Care Technology

Assessment (NCHSR)), received $17 million (or approximately 18% of the maximum amount authorized) in PHS one percent evaluation funds through two sources. First, the authorizing legislation for NCHSR made 7.5 percent (or $7 million) of the maximum amount authorized in section 2611 available to the Center. Second, the NCHSR received $10 million in one percent evaluation funds through FY 1989 appropriation language contained in P.L. 100-436 to support the National Medical Expenditure Survey (NMES). Similarly, the Centers for Disease Control (CDC) received $19 million through FY 1990 appropriation language contained in P.L. 101-166 to support various survey activities of the National Center for Health Statistics (NCHS).

I would agree that earmarking one percent evaluation funds to support some of our activities within the PHS is an unusual funding mechanism. Direct appropriation of general budget authority is an alternative route. However, given the cross cutting nature of the authorities contained in P.L. 101-239 for the new Agency, particularly with respect to the AHCPR's Medical Treatment Effectiveness Program (MEDTEP), the use of PHS one percent evaluation funds is an effective funding mechanism.

Mr. Natcher: Would it be accurate to say that to a large extent this new agency will not have to compete for funds in the budget process with other health programs because of this automatic transfer arrangement?

Dr. Mason: The formulation of future budget requests for the Agency for Health Care Policy and Research (AHCPR) will continue to reflect competition for funds with other high priority health programs within the Public Health Service and the Department of Health and Human Services. The Agency's budget is not comprised solely of PHS one percent evaluation funds.

In FY 1991, we are requesting $39 million in budget authority and $29 million in Medicare Trust Funds for AHCPR activities. Authorization levels for AHCPR in FY 1992 include $70 million in budget authority for general health services research activities under Title IX of the PHS Act, and $36.6 million in budget authority and $73.4 million in Medicare Trust Funds for outcomes research under Title XI of the Social Security Act. As we formulate our FY 1992 budget request to the Department and the Office of Management and Budget, the AHCPR will have to compete for any increase in these funds over FY 1991 along with other Departmental programs.

MEDICAL TREATMENT EFFECTIVENESS PROGRAM

Mr. Natcher: The medical treatment effectiveness portion of the new agency goes up from $5,877,000 in 1989 to $48,518,000 in 1991, or an eight-fold increase. Doctor, do you have specific plans for that increase, or will it take you a while to figure it out?

Dr. Mason: We do have specific plans for this increase. Within the Agency for Health Care Policy and Research (AHCPR), the Medical Treatment Effectiveness Program (MEDTEP) will be implemented through several related activities: medical effectiveness/patient outcomes research; data base development; dissemination of findings; and development of practice guidelines.

Medical Treatment Effectiveness Program
$000

Program Activities	FY 1989	FY 1990	FY 1991	+/-
Outcomes Research & Data Development	$ 5,877	$34,697	$43,169	+$8,472
Guidelines	---	1,839	2,649	+ 810
Dissemination	---	1,000	2,700	+ 1,700
Total, MEDTEP	$ 5,877	$37,536	$48,518	+10,982

In FY 1990 and FY 1991, AHCPR will continue funding 5 grants which are supporting Patient Outcomes Research Teams (PORTs) that are developing and testing methods to reduce inappropriate variations in the treatment of:

-- Low back pain
-- Heart attacks
-- Cataracts
-- Prostate gland enlargement
-- Knee replacement

During FY 1990 and FY 1991, several new PORTs will be funded to identify and analyze the outcomes of alternative practice patterns, including the effects on patient survival, quality of life, and cost of care. Since all grant applications first have to undergo peer review, a list of diseases or disorders to be studied is tentative. However, possible topics include:

-- Hip fracture and replacement
-- Diabetes
-- Cerebral vascular disease
-- Breast cancer
-- Congestive heart failure
-- Pneumonia
-- Biliary tract disease and cholecystectomy
-- Colon cancer
-- Hysterectomy
-- Osteoarthritis
-- Ischemic heart disease

In addition to funding PORTs, the AHCPR is working with each Public Health Service (PHS) agency and the Health Care Financing Administration (HCFA) to explore opportunities for collaborative MEDTEP efforts. For example, as part of its dissemination activities under this program, the AHCPR has recently entered into an intraagency agreement with the Health Resources and Services Administration (HRSA) to develop health profession educational programs for HRSA supported Area Health Education Centers and geriatric centers to use to disseminate research findings and guidelines.

With our colleagues in HCFA, we are in the final stages of a major transfer of FY 1990 funds ($5.0 million) to help support the data development component of MEDTEP. The HCFA role includes linking, standardizing, and improving Medicare and Medicaid data; adding supplemental measures of health status to existing data; and generating special data sets for studies on specific subpopulations of program beneficiaries. This arrangement will be continued with HCFA in FY 1991.

Research findings from MEDTEP also will be a major source of information for a collaborative governmental and private efforts to develop practice guidelines regarding the appropriate use of health care services and procedures. In FY 1990 and FY 1991, AHCPR's Office of the Forum for Quality and Effectiveness in Health Care will convene panels of experts to develop guidelines, standards, review criteria, and performance measures to assess and help improve the quality of care.

MEDICAL PRACTICE GUIDELINES

Mr. Natcher: What is the purpose of the guidelines program that you are carrying out?

Dr. Mason: The Omnibus Budget Reconciliation Act of 1989, P.L. 101-239, requires the Agency for Health Care Policy and Research (AHCPR) to develop a series of clinical practice guidelines "...that may be used by physicians, educators, and health care practitioners to assist in determining how diseases, disorders, and other health conditions can most effectively and appropriately be prevented, diagnosed, treated, and managed clinically."

The guidelines developed by AHCPR will be just that: guidance. First, we intend to work with the relevant health professional societies and consumers in the development of clinical guidelines. The AHCPR has no intention of developing them unilaterally. The guidelines will be developed collaboratively with groups such as physician practice and specialty organizations, allied health professional organizations, accreditation organizations, foundations, research agencies, Federal and State health agencies, and international health agencies. Second, the research and guidelines developed through our Medical Treatment Effectiveness Program (MEDTEP) have a simple goal: to reduce the uncertainty that physicians face regarding the most effective treatment approach for patients.

Mr. Natcher: How will these medical practice guidelines be used?

Dr. Mason: Practice guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances. Practice guidelines are intended to assist patients and practitioners in making decisions about health care. They describe what is clearly appropriate or inappropriate care, and they also describe care that the scientific evidence and consensus cannot identify definitively as either appropriate or inappropriate. The guidelines will pertain to specific clinical circumstances, which may include clinically relevant organizational factors, social considerations, and similar influences on health care delivery. They should be developed in a formal, systematic way that can be fully documented.

Attributes of Guidelines:

Credibility - The degree to which guidelines are grounded in science, the qualifications and experience of those developing guidelines, and the degree of compatibility with the actual circumstances of practitioners and patients.

Disclosure - The process of development should be outlined in detail, including the identities and biases of participants, the procedures used for evaluation, and what underlying assumptions were made.

Validity - Guidelines should include an explicit discussion of how the evidence relates to the final product, assessments of the strength of scientific evidence and professional consensus, areas of conflict, and the relative weights given to consensus and science.

Reliability/reproducibility - Proof should be available that guidelines can be applied properly by a given practitioner in different situations, and similarly by different practitioners in similar circumstances.

Clinical adaptability - There should be a clear description of population to which guidelines apply, including appropriate explanations of pathophysiology, demographic characteristics, social support systems, etc.

Flexibility - This measures the extent to which exceptions are identified. Foreseeable exceptions should be clearly identified, classification should be made of idiosyncratic (less predictable) exceptions, patient preferences which should be considered, and guidelines should identify what additional data should be collected as justification for exception.

Clarity - Guidelines should be written in unambiguous language about appropriate populations and circumstances, and all key terms should be defined.

Scheduled review - A review date should be included, based on the pace and quality of relevant research.

Applicability to health systems management - The guideline should be applicable as a link between quality assurance and health systems management.

Research relevance - The guideline should direct new research that will provide information on the condition, improve current treatments, reduce uncertainty about the appropriateness of alternative treatments, and/or promote the establishment of consensus.

AHCPR INTERAGENCY AGREEMENTS

Mr. Natcher: You're proposing to spend $7,500,000 on interagency agreements in the new agency in 1991. What is the purpose of this?

Dr. Mason: As part of our collaborative efforts under the Medical Treatment Effectiveness Program (MEDTEP), the Agency for Health Care Policy and Research (AHCPR) will support intraagency agreements with at least two other agencies in FY 1991.

First, AHCPR will continue its intraagency agreement with the Health Care Financing Administration (HCFA) for data development activities at a level of up to $6.5 million. The role of HCFA in this agreement includes: linking, standardizing, and improving Medicare and Medicaid data; adding supplemental measures of health status to existing data; and generating special data sets for studies on specific subpopulations of program beneficiaries.

Second, AHCPR will continue working with the Health Resources and Services Administration (HRSA). Through an intraagency agreement of approximately $1.0 million, HRSA will assist AHCPR in the dissemination and assimilation of medical effectiveness research findings into clinical practice through its long-standing support of health professions education and curriculum development.

Other intraagency agreements are being discussed with the Centers for Disease Control and the National Institutes of Health.

NATIONAL VACCINE PLAN

Mr. Natcher: Doctor, pursuant to the National Vaccine Act of 1986, the Department is supposed to prepare a National Vaccine Plan. Is that correct?

Dr. Mason: Yes, that is correct. The National Vaccine Plan is a comprehensive, long-range plan describing the actions the nation should undertake to "achieve optimal prevention of human infectious diseases through immunization and to achieve optimal prevention against adverse reactions to vaccines."

Mr. Natcher: What is the current status of the Plan, and when will it be completed?

Dr. Mason: Development of the Plan is a collaborative effort of the National Vaccine Program and the National Vaccine Advisory Committee (NVAC). The current draft Plan, based on the legislation, is guiding the Department's activities. This interim document provides observations, recommendations and long-range objectives in the form of policy guidance and program direction. Once fully developed, the Plan will include specific activities, work plans and implementation schedules. The Plan will also include vaccine goals established in the ten-year PHS prevention agenda.

The NVP projects completion of a final draft Plan for review by the NVP Director by the end of 1990. The Plan will be submitted to Congress early in calendar 1991.

Mr. Natcher: As you see it now, what will be the broad outline of the plan?

Dr. Mason: The National Vaccine Advisory Committee (NVAC) decided to address seven areas representing the major elements of the National Vaccine Plan. These are: 1) Resources and Funding; 2) Improving Existing Vaccines; 3) Adverse Events; 4) Vaccine Utilization; 5) Vaccine Supply; 6) Vaccine Licensing; 7) Development of New Vaccines; and 8) Adult Immunization.

The current draft document contains three sections. The first is a general narrative about immunization. The second is the National Vaccine Policy Statement. The body of the draft Plan consists of eight sub-sections that correspond to subcommittee issues established by the NVAC. As each NVAC subcommittee completes its deliberations and the NVAC reviews those positions, they will be incorporated into the draft Plan.

NATIONAL VACCINE PROGRAM BUDGET REQUEST

Mr. Natcher: How much money is specifically authorized for the National Vaccine Program for 1991?

Dr. Mason: For FY 1991, the Congress authorized $30 million for National Vaccine Program activities and $4 million for National Vaccine Program Office coordination efforts.

Mr. Natcher: How much is included in the budget request for 1991 to carry out the authorization?

Dr. Mason: In FY 1991, the President's budget request includes $6.9 million for National Vaccine Program (NVP) activities. However, there will also be $7 million in resources requested by other PHS agencies that will enable the NVP to address other priority areas identified in consultation with the National Vaccine Advisory Committee.

Mr. Natcher: What do you plan to concentrate on in the coming year in the National Vaccine Program?

Dr. Mason: In FY 1991, the National Vaccine Program requests $6.9 million for pertussis vaccine research and program coordination activities. The NVP will carry out the following high priority operations and activities:

Pertussis vaccine research and clinical field trial activities leading to the development and introduction of an improved (acellular) vaccine is the highest priority of the NVP. To maximize the likelihood of success, the NVP will carry out a field trial of acellular vaccines (compared to whole-cell vaccine and, if possible, placebo) in settings with an appreciable incidence of pertussis disease. In addition to a field trial of candidate pertussis vaccine, additional basic and applied research is planned to accelerate the development of new candidate vaccines.

Recruitment will be completed for the staff necessary to comply with legislative requirements to establish the National Vaccine Program and to "coordinate and provide direction for" all vaccine-related activities in the Federal Government.

There will also be $7 million in resources requested by other PHS agencies that will enable the NVP to address other priority areas identified in consultation with the National Vaccine Advisory Committee. NIH plans to devote $4.5 million to carry out an additional pertussis vaccine field trial and additional basic and applied research to accelerate the development of new candidate pertussis and other vaccines, including conjugated polysaccharide vaccines. This research includes projects to elucidate mechanisms of pathogenesis, identify candidate vaccine antigens, provide improved diagnostic methods, and determine immunity to pertussis and other diseases. The research will also help the regulatory evaluation of vaccines. NIH will work in conjunction with CDC and FDA on these activities.

FDA will support additional basic research (both intramural and extramural) to develop serological correlates of protection for pertussis and other vaccines. This is particularly important for the identification of vaccine candidates for clinical testing. FDA will make available $500,000 for this activity.

CDC plans to devote $500,000 for additional studies to develop rapid diagnostic tests to detect measles virus infection and $1.5 million to monitor the safety of licensed vaccines.

Mr. Natcher: Why do you need 5 additional staff in the NVP in FY 1991?

Dr. Mason: The National Vaccine Program (NVP) was established under Title XXI, Subtitle 1, of the Public Health Service Act, to achieve optimal prevention of human infectious diseases through immunization and to achieve optimal prevention against adverse reactions to vaccines. Specifically, the office is responsible for the coordination and direction of vaccine research, vaccine development, safety and efficacy testing of vaccines. Licensing of vaccine manufacturers and vaccines, production and procurement of vaccines, distribution and use of vaccines, evaluating the need for, the effectiveness and adverse effects of vaccines and coordinating Government and non-Government activity as far as providing the secretariat functions for the National Vaccine Advisory Committee (NVAC). Furthermore, provisions of Title XXI, Subtitle 2, are to be implemented by NVP: the development and dissemination of vaccine information materials to provide consumer information about the risks associated with immunization; the collections and analysis of information about vaccine-related adverse events; and oversee studies called for by the National Childhood Injury Act of 1986, Title III of P.L. 99-66 that examine the relationship between childhood vaccine and specified illness and conditions.

The positions allocated to the NVP are used both in the National Vaccine Program Office (NVPO) and the PHS agencies responsible for vaccine work. Only 9 FTEs are used directly in NVPO. The remainder are allocated to the PHS agencies to enable them to undertake NVP activity. The NVAC strongly recommend that additional staff be provided to NVPO to enhance the NVPO capacity to fully coordinate the legislative mandated activities. The scheduled increase in vaccine activity requires a commensurate increase in program management and coordination activity in NVPO.

Mr. Natcher: What other high priorities do you have in the vaccine program that you were not able to include in the budget request?

Dr. Mason: In future years, other activities that will likely receive priority attention include implementation of second-dose measles recommendations; studies to develop rapid diagnostic tests for measles; clinical trials with more potent candidate conjugated vaccines and extramural laboratory research to evaluate new/improved candidate vaccines; additional research to develop pre-licensure and improve post-licensure safety testing of vaccines as well as post-marketing surveillance of vaccine safety; improving polio vaccine called for by the Institute of Medicine and acceleration and enhancement of current research efforts; intramural and extramural research to develop serological correlates of protection of vaccines; and projects to address vaccine development and diagnostic issues of tuberculosis.

ADOLESCENT FAMILY LIFE

Mr. Natcher: In your view, what is the purpose of the Adolescent Family Life program?

Dr. Mason: The purpose of the Adolescent Family Life (AFL) program is to explore effective means, within the context of the family, to promote abstinence from adolescent premarital sexual activity; to promote adoption as an alternative for adolescent parents; to establish innovative, comprehensive and integrated approaches to providing comprehensive care (health, education and social services) to pregnant adolescents and adolescent parents, with primary emphasis on unmarried adolescents age 17 and under, and; to support research dealing with various aspects of adolescent pregnancy such as determinants and consequences of premarital sexual activity, the adoption decision-making process, parenting by the unmarried adolescent mother and its impact on offspring and effectiveness of discrete strategies employed in care and prevention service programs.

Mr. Natcher: Do you see this as a permanent program, or will it end at some point?

Dr. Mason: The AFL is a demonstration program, and we are currently proposing reauthorization for an additional three years.

TUBERCULOSIS

Mr. Natcher: Doctor, how serious is the problem of tuberculosis in this country?

Dr. Mason: Tuberculosis (TB) has been a potentially preventable and curable disease for 3 decades. But despite efforts to control this disease, TB remains an important public health problem for the United States and the world.

Left untreated, TB is a deadly disease. About 50 percent of patients will die within 2 years after symptoms appear. Throughout history, TB has ravaged all racial/ethnic and income groups; but the poor, racial/ethnic minorities, and the foreign-born are disproportionately affected.

From 1953 through 1984, the United States experienced a significant decrease in the number of new TB cases reported; from 84,304 cases in 1953 to 22,255 cases in 1984. Since 1984, however, the long-term decline has stopped. The CDC estimates that from 1985 through 1989, nearly 21,000 excess cases have accumulated. In addition, an estimated 10 million Americans are infected with the TB bacillus and are at risk of developing the disease in the future.

TB is increasing among young Blacks and Hispanics, while TB among non-Hispanic whites continues to decline. From 1985 through 1988, cases among Blacks and Hispanics in the 25- to 44-year age group increased from 4,051 to 5,103. In 1988, about two-thirds of all cases occurred in minority populations. At least 4,865 cases of TB cases in minorities were potentially preventable. This trend is probably attributable in part to TB occurring in persons infected with HIV, the virus that causes AIDS.

AIDS-associated TB has occurred in all age groups, in both men and women, and in all HIV-transmission categories, although the largest number of cases have occurred in intravenous drug users and homosexual/bisexual men.

There is an extremely high prevalence of TB among AIDS patients: approximately 4 percent of persons with AIDS have had TB. In contrast, the incidence of TB in the general population in 1988 was 9.1 cases per 100,000 population, or .009%. As of December 1989, HIV testing is being performed on TB cases and suspects in 73 sites in 33 States. Preliminary results indicate a range of seropositivity between 0 and 57 percent.

Among children less than 15 years of age, 83 percent of cases (936) occurred in minorities. The continuing occurrence of TB in children is a sentinel health event--a warning signal that the quality of medical care needs to be improved.

A related issue is TB in the foreign-born. In 1988, 22 percent of all persons with TB reported to the CDC were born in another country. Sixty-six percent of foreign-born cases were potentially preventable had they been identified as infected and given preventive therapy.

The elderly, i.e., persons 65 years of age and older, are also disproportionately affected by TB. During 1988, 27 percent of reported cases (6,058) occurred in the elderly, although this age group makes up only 12 percent of the population. Nursing home residents have higher case rates than the elderly not living in nursing homes, suggesting that TB is being transmitted within these facilities.

Transmission of TB has also been documented in other facilities, such as prisons and shelters for the homeless. A 29-state CDC survey revealed that prison and jail inmates have TB case rates nearly four times the rate among non-incarcerated adults ages 15-64. In addition, data from selected areas show that a relatively high proportion (1.6 to 6.8 percent) of America's homeless have TB, and up to 50 percent have latent TB infection. This is many times higher than the national TB case rate (9.1 cases per 100,000 population, or .009%). It is estimated that approximately 15% of the U.S. population ages 25-54 have latent TB infection.

Mr. Natcher: Does the Department have some kind of a plan for controlling tuberculosis?

Dr. Mason: Tuberculosis (TB) can be eliminated from the United States. It is occurring predominantly in focal geographic areas and demographically well-defined populations which can be targeted for intensified control and elimination efforts. The strategies have been devised and only need be implemented.

In April 1989, an HHS Advisory Committee for Elimination of Tuberculosis (ACET) published a plan for eliminating TB from the United States by the year 2010. Department of Health and Human Services (HHS) Secretary, Louis W. Sullivan, M.D., has endorsed this plan. The American Medical Association, the American Lung Association, the American Public Health Association, and the American College of Preventive Medicine and several other health care organizations have also endorsed the plan and are committed to participating in its implementation.

The plan consists of three parts:

1. The more effective use of existing prevention and control methods in high-risk target populations.
2. The development and evaluation of new technologies for treatment, diagnosis, and prevention.
3. The rapid assessment and transfer of newly developed technologies into clinical and public health practice.

Mr. Natcher: To what extent would additional federal funding make a difference in this area?

Dr. Mason: If additional federal funding were available, further implementation of the Department's Strategic Plan for the Elimination of Tuberculosis in the United States could be undertaken to: (1) more effectively utilize existing prevention and control methods in high-risk populations; (2) develop and evaluate new treatment, diagnostic, and prevention technologies; and (3) rapidly transfer newly developed technologies into clinical and public health practice.

Through implementation of the Department's Strategic Plan cases of TB in high-risk population groups such as minorities, children, those with HIV infection, the elderly, the homeless, and the foreign-born would be prevented. However, PHS is not requesting additional funds for this purpose within the priorities of the

1991 budget, and no further offsets have been identified to accommodate such increases.

PHS MANAGEMENT BUDGET ACTIVITY

Mr. Natcher: In your management activity you're requesting an increase of $1,699,000, or 9 percent over 1990. Why is this rather sizeable increase necessary?

Dr. Mason: Over the past several years, the resources available to the Assistant Secretary for Health for the management of the Public Health Service have eroded substantially. This erosion has been the result of sequestrations, across the board reductions, continuous absorption of pay raises, and legislatively required increases such as the Military Officers Retention Bonus pay. PHS Management has not received a pay supplemental since 1980. During this time of continuing reductions in resource levels, responsibilities for new missions and initiatives continue to emerge.

For these reasons, in FY 1991 we are requesting restoration to the FY 1990 pre-sequestration level plus the FY 1991 mandatory increases, including the January 1991 executive pay increase. Because this account finances the oversight of the Public Health Service, it includes a significant number of Senior Executive Service employees and flag officers. The FY 1990 level of funding will not permit the replacement of any of the aging equipment. Our professional employees need reliable automated data processing equipment to partially compensate for reduced staff and increased workload. The funds requested for FY 1991 will allow for the purchase of some up-to-date ADP equipment.

During the last few years this account has been managed hand to mouth. Constant reductions and restrictions have been applied to live within the budget constraints. I need some flexibility to be able to direct resources to emerging priorities. This request will give me that leeway and assure effective oversight and direction of PHS programs.

Mr. Natcher: If the Committee decided to hold salaries and expenses activities at the 1990 dollar level in 1991, what effect would it have on operations?

Dr. Mason: If the FY 1991 level of funding is maintained at the FY 1990 level, the effect would be quite severe. The absorption of the additional mandatory increases would mean that funds would be insufficient to pay current staff. We would very likely have to furlough some of our current staff.

Mr. Natcher: What is the cost of the recent Federal pay increase in this account in 1990.

Dr. Mason: The cost in FY 1990 for the pay raise and related costs is $466,000.

Mr. Natcher: How are you absorbing this?

Dr. Mason: Several management actions have been taken. Vacancies, except for a few senior level positions, have not been filled. Travel has been significantly curtailed; most training has been eliminated; purchases of equipment to support our automation plan and improve efficiency has been postponed. All planned expenditures have been examined in an effort to reduce costs and save funds.

DISEASE PREVENTION AND HEALTH PROMOTION

Mr. Natcher: What were the main accomplishments during the past year of the Office of Disease Prevention and Health Promotion.

Dr. Mason: Three major accomplishments were:

- Completion of a four-year effort supporting the U.S. Preventive Services Task Force and publication of *A Guide to Clinical Preventive Services.* The project resulted in a set of recommendations to primary care medicine and related health care providers on scientifically grounded age- and gender-specific screening, immunization, and counseling preventive services.
- Follow-up activities to the *Surgeon General's Report on Nutrition and Health*, including completion of a modeling project to analyze the contribution of dietary fat to premature mortality in the American population, initiation of a project to highlight exemplary school lunch programs that reflect the dietary implications of the Report, and initiation of a DHHS(FDA)-USDA joint project, with assistance from the Food and Nutrition Board (Institute of Medicine, National Academy of Sciences), to improve regulation of food labeling.
- Management on behalf of the ASH and the Public Health Service of the third and fourth phases of the process to develop health promotion/disease prevention objectives for the year 2000. The third phase involved publication of a draft of proposed objectives for public review and comment. The fourth phase involved receipt of public review and comment. We are currently engaged in leading Public Health Service-wide work to refine the draft objectives in time for their publication in final form in September 1990.

Other accomplishments include continued information service through the National Health Information Center,convening of numerous interagency and interdepartmental coordinating groups (e.g. school health education, DHHS Nutrition Policy Board, DHHS Prevention Coordinating Group, prevention of disabilities, health risk appraisal research, annual nutrition symposium, U.S. Preventive Services Coordinating Committee), and published *Prevention Report* with abstracts of recent prevention scientific literature.

Mr. Natcher: Does the 1991 budget of the Office allow for initiation of any new activities?

Dr. Mason: The FY 1991 budget of the Office of Disease Prevention and Health Promotion will support continuation of current activities.

Mr. Natcher: Will the Office be discontinuing any current activities in 1991?

Dr. Mason: The Office of Disease Prevention and Health Promotion has no plans to discontinue any current activities in 1991.

MINORITY HEALTH INCREASES

Mr. Natcher: You're requesting an increase of $11,594,000 for minority health activities. Specifically, how will you use the $4,000,000 requested for interagency agreements?

Dr. Mason: There are opportunities within all PHS programs for improving the health status of minority populations. The Office of Minority Health (OMH) serves as a catalyst to generate programmatic activities among PHS agencies to accomplish this objective. The OMH will use the interagency mechanism to help initiate and support projects to be undertaken by PHS agencies. Funding support from the OMH will allow part of the projects to focus on services or activities to improve minority health status. For example, under an interagency agreement with the Health Resources Administration (HRSA), a project will be undertaken to improve and expand the capability of HRSA's Area Resource File (ARF) in identifying and describing local and national minority health issues and problems. HRSA will develop an ARF county profile that will highlight minority health problems by county and state. This can be used by OMH as well as local analysts to better evaluate the health status and needs of minority populations.

Mr. Natcher: Why is it going to cost $1,000,000 to update the Task Force Report?

Dr. Mason: An update of the Task Force Report will require the Office of Minority Health (OMH) to undertake a number of different activities. First, the OMH intends to convene an expert panel similar to the one used for the original report. This panel will include greater representation and involvement of non-Federal experts than the 1984 panel. The Secretary has also requested that an invitational conference be held to obtain further insight on the health status of minority populations. Secondly, the OMH must obtain updated data and information for specific minority groups, where available. The $1 million will be used to reimburse members of the expert panel for their time and expenses, the acquisition and analysis of data; and partial support of the Secretary's invitational conference.

FAMILY PLANNING

Mr. Natcher: What is your 1991 proposal for the family planning program (Title X)?

Dr. Mason: The Department is supporting passage of S. 1671 in the Senate and introduction and action on a comparable bill in the House of Representatives which would reauthorize the current categorical Title X program as a state administered family planning program. The budget request to Congress is based on the enactment of this new legislation at the same level of funding received by the categorical program in FY 1990.

Mr. Natcher: Has legislation been submitted to the Congress and introduced?

Dr. Mason: A proposal was submitted to Congress for legislation authorizing a state administered family planning program. Senator Coates has introduced S. 1671 which fully reflects the Department's proposal.

Mr. Natcher: When was this program last authorized?

Dr. Mason: The last authorization received expired on September 30, 1985.

Mr. Natcher: How many people were assisted by this program in fiscal 1989?

Dr. Mason: Final data on FY 1989's client count will be available shortly. Based on analysis of preliminary FY 1989 data, we believe that when the data are available, they will show a client count of approximately 4 million.

EVALUATION OF FAMILY PLANNING PROGRAM

Mr. Natcher: When was the last full-scale evaluation of this program done?

Dr. Mason: A broad comprehensive evaluation of the Title X program has never been undertaken. However, evaluation of Title X projects have been accomplished through several means. These include the evaluation of individual grantees on a three year program review cycle, examination of particular issues of relevance by the reproductive health evaluation staff of the Centers for Disease Control, collection of data on program performance through data collected in the Bureau Common Reporting Requirements (BCRR), development of data on family planning trends through the National Survey of Family Growth, and examination of approaches to improve efficiency and effectiveness in the delivery of family planning services through independent research performed under the Title X services delivery improvement program. In addition, because of the controversial nature of the family planning program, there has been a series of independent evaluations and assessments by General Accounting Office, the HHS Office of Inspector General and the Congressional Research Service to examine the program's performance against law and regulations.

Mr. Natcher: What were the principal findings?

Dr. Mason: As indicated previously, no full-scale evaluations of the effects of Title X have yet been conducted. Several studies have looked at the effect of organized family planning services and have produced mixed conclusions regarding the effects of these services on pregnancy, abortion and birth rates.

Results of these studies are inconclusive. All are hampered by lack of precision (and policy consensus) as to the goal of family planning programs, difficulty in measuring abortions and pregnancies, as well as fundamental disagreements as to the nature of the relationships between provision of family planning services and the initiation or continuation of sexual activity among teens.

CLINICS SUPPORTED BY FAMILY PLANNING

Mr. Natcher: Has there been any change in the number of clinics funded under the Family Planning program in the last five years?

Dr. Mason: Differences in grantees' descriptions of their Title X programs, closing of some clinics and opening new clinics results in a constant change in the numbers and locations of Title X clinics. Over the past five years, although there have been slight variations up and down, the number of Title X clinics has remained fairly constant at about 4,000.

Mr. Natcher: Do clinics supported by Family Planning typically receive other Federal funds?

Dr. Mason: Title X clinics are required to bill Medicaid and other third party payers for services to clients eligible for such support. In addition, in many parts of the country, Title X projects are integrated with other Federally supported projects, such as county health programs which receive Title X and Maternal and Child Health block grant funds. In other cases, Title X projects are integrated with Indian Health, Migrant Health or Community Health centers.

Mr. Natcher: Identify how much funding was allocated for training, research, and information and education in 1989.

Dr. Mason: In FY 1989 the following amounts were allocated to these program activities:

o	Training	$3.4 M
o	Research	$1.9 M
o	Information/Education	$0.2 M

CONTINUATION OF PROGRAM

Mr. Natcher: If your legislative proposal were not enacted, how many additional full-time equivalents would be needed to maintain program operations in 1991, and at what cost?

Dr. Mason: Continuation as a categorical program would require restoration to the level of 55 FTEs (35 more than the 1991 proposal) and support costs of $3.4 million, the same amount received by the program in FY 1990.

STATUS OF LAWSUITS

Mr. Natcher: What is the status of the lawsuits regarding the abortion referral regulations you published in 1988?

Dr. Mason: In 1988, three separate lawsuits were filed in the District Courts in Denver, Boston, and New York challenging the regulations on statutory and constitutional grounds. The Department was enjoined from enforcing the regulations by the District Courts in Denver and Boston; the New York court upheld the regulation.

All three cases were appealed. On May 8, 1989, the United States Court of Appeals for the First Circuit (Boston) affirmed the lower court decision striking down the regulations.

The Department requested and was granted an en banc rehearing of the First Circuit decision. On March 19,1990, the First Circuit Court of Appeals, sitting en banc, upheld the Boston District Court decision.

On November 1, 1989, the United States Court of Appeals for the Second Circuit affirmed the decision of the New York District Court upholding the regulations. Plaintiffs have obtained a stay of that decision pending appeal to the Supreme Court.

The U. S. Court of Appeals for the Tenth Circuit has not yet ruled on the decision of the Denver District Court, and the permanent injunction entered by that court remains in effect. Thus, at this time there are two Circuit Court rulings, one upholding the Department's position and another striking it down.

In 1989 a lawsuit was filed by several Title X subgrantees in West Virginia seeking to enjoin implementation of the regulations in that state. A decision was rendered on March 1 partly upholding and partly invalidating the regulations.

The Department has implemented the regulations as grants have come up for renewal except where enjoined from enforcing the regulations. To date, the regulations are being implemented in Kentucky, Texas, South Dakota, Iowa, part of Nevada and all of the territories.

NIH MANAGEMENT

Mr. Natcher: Congress and this Committee have long been supporters of the NIH. In recent years, however, there have been concerns about scientific misconduct, procurement weaknesses, and cost management deficiencies. In your personal opinion, what kind of problems will a new NIH Director find from a management point of view?

Dr. Mason: I believe recruitment and retention of senior researchers and research administrators is the foremost problem currently facing NIH. The underlying difficulties go beyond salary levels, though that is the most critical factor. In addition to providing competitive salaries, we must also provide at least adequate facilities and support services. This leads to another of our most pressing management concerns, deterioration of the physical plant at NIH. In allocating the FY 1991 request, NIH gave its highest priority to the support of its intramural infrastructure. Extensive improvements over the next ten years will be required in order for NIH to continue to conduct biomedical research on the campus. The NIH Infrastructure Modernization and Improvement Program has been designed to meet these needs.

Maintaining public confidence in science in general and NIH in particular remains an important concern. To that end, NIH has strengthened and expanded efforts to deal with misconduct in science through establishment of the Office of Scientific Integrity in the Office of the Director; improvements in record keeping and communications systems; educational initiatives and special training sessions for all staff whose responsibilities include scientific program management and administration of grants and contracts. These efforts continue to improve NIH's performance in the prevention of scientific misconduct. I see this issue in broader terms, however. It also encompasses the public's concern over the use of laboratory animals, protection of human subjects who participate in applications of medical research, and emerging relationships between industry and NIH.

Regarding procurement weaknesses, I would not term that as a problem that would face the new Director of NIH. The Procurement Action Plan, developed by NIH and approved by the Assistant Secretary for Health and the Assistant Secretary for Management and Budget, has enabled NIH to correct deficiencies in its procurement process. The Plan has focused attention on vendor discounts, regulatory compliance, organizational issues, and warehouse stocking criteria. I believe that continued monitoring of the procurement process will prevent future problems of any magnitude from occurring.

TWO-DOSE MEASLES VACCINE

Mr. Natcher: Both the Public Health Service and the American Academy of Pediatrics now recommend two doses of measles vaccine. Routine use of two doses would prevent the outbreaks of disease we are seeing with a single dose. How will the National Vaccine Program in your office assure that there are sufficient resources available so that American children receive the two recommended doses of measles vaccine?

Dr. Mason: Recent outbreaks of measles in previously vaccinated individuals have led The American Academy of Pediatrics and the Immunization Practices Advisory Committee (ACIP), a Centers for Disease Control advisory committee of outside medical experts, to recommend a two-dose strategy.

However, because of other priorities, including prevention of perinatal Hepatitis B transmission, increased pre-school immunizations, and measles outbreak control, we are not requesting funding to implement second-dose measles recommendations in FY 1991.

Mr. Natcher: This Committee has always needed to add funds for clinical trials of vaccines to assure that they are available to the public for the prevention of disease. Now that you have funds and a full-time staff for the National Vaccine Program, can you tell the Committee how you will use the planning capacity of the National Vaccine Program to assure that the funds needed to make "optimal" use of vaccines (as required by the law) are available when new vaccines are ready for clinical trials?

Dr. Mason: The planning capacity of the National Vaccine Program (NVP) is incorporated in the National Vaccine Advisory Committee, the NVP Interagency Group and the National Vaccine Program Office. Through the coordination activities of the NVP Deputy Director with these groups, recommendations on all aspects of vaccine activity, including vaccine research priorities, are made to the Assistant Secretary for Health, who is also responsible for the direction of the NVP. For specific vaccine issues, the NVP often obtains the counsel of government and nongovernment experts. For example, the NVP Interagency Subgroup on Pertussis is currently monitoring preparations being made for a large-scale clinical efficacy field trial of acellular pertussis vaccines. To help decide which candidate acellular pertussis vaccines should be in included the field trial, a work group of outside experts established through the National Institutes of Health is preparing its recommendations. When clinical data establish vaccine safety and efficacy and a license to market a vaccine product is approved by the FDA, optimal use issues are reviewed and recommendations are made by CDC's Immunization Practices Advisory Committee and nongovernment professional organizations, such as the Committee on Infectious Diseases of the American Academy of Pediatrics.

NATIONAL SURVEY OF SEXUAL BEHAVIOR

Mr. Natcher: Have you requested any funds in the 1991 Public Health Service agency budgets for a national survey of sexual behavior? If so, how much?

Dr. Mason: There are no funds requested in FY 1991 for a national survey on sexual behavior.

PERTUSSIS VACCINES

Mr. Conte: The National Vaccine Program is involved in developing acellular pertussis vaccines. What are the clinical advantages of acellular pertussis vaccines?

Dr. Mason: The currently licensed vaccines containing a pertussis component which are available in the U.S. are prepared using inactivated whole Bordetella pertussis organisms. The use of these products (such as DTP) is commonly associated with local reactions at the site of the injection, and systemic events such as irritability and fever. The vaccine is associated less commonly with more serious event, such as febrile seizures. Severe permanent neurologic damage has rarely been attributed to pertussis-containing vaccines, although many authorities question this association. The currently available whole cell vaccines are considered effective in preventing whooping cough (pertussis).

The primary potential advantage of acellular pertussis vaccines is increased safety. The ideal acellular pertussis vaccine would contain those components which are necessary for conferring protection against both infection and disease (efficacy), and yet the components would be either non-toxic or detoxified or appropriately modified to make a safe and/or non-reactogenic product. Techniques are now available to select components which can be highly purified, combined in defined proportions, and which appear to be potential important protective immunogens. Such vaccines also have the potential for leading to a reduction in the number of doses required to achieve immunity that is long lasting. Vaccines with reduced reactivity might also be given to adolescents and adults, as well as children. The use of a vaccine which prevents not only disease but also infection might be expected to reduce, if not eradicate, the disease. The efficacy of any such acellular vaccine needs to be demonstrated, and large studies would be needed to evaluate any enhanced safety that acellular vaccines may have.

Mr. Conte: What are the prospects for better vaccines for meningitis, a major contributor to childhood mortality?

Dr. Mason: Bacterial meningitis is a major life threatening disease of young children. Four organisms cause most bacterial meningitis; Hemophilus influenzae, group B streptococci, meningococci, and pneumococci. H-influenzae causes meningitis and other invasive diseases in 20,000 children each year. Five to 10% die and 25 to 40% have permanent residual effects, including mental retardation. Group B streptococci is the predominant cause of neonatal meningitis and septicemia resulting in substantial problems and death. It causes about 10,000 cases per year, and over 25% of the children with neonatal Group B streptococcal meningitis each cause 3,000 to 4,000 causes of meningitis per year in the United States; however, their case fatality rates are quite different. Approximately 10% of meningococcal meningitis patients die, compared to over 25% of children with pneumococcal meningitis. The meningococcus, unlike the other organisms, causes epidemic disease, requiring rapid intervention. Due to the severity, frequency, and deaths caused by these organisms improved vaccines for prevention of meningitis are needed.

Prevention of meningitis is highly cost effective. It is estimated that one episode of meningococcal meningitis may result in $50,000 to $250,000 in hospital costs.

All of these organisms have surfaced polysaccharide capsules. Antibodies to the capsules protect against the respective organisms. The problem is that polysaccharides are immunogenic in older children and adults, but frequently not immunogenic in infants and toddlers. Research conducted in part at the FDA and NIH has led to a new type or class of product called conjugate vaccines. Unlike the polysaccharide alone, a conjugate can stimulate polysaccharide antibodies in these young children. New technologies were developed to permit effective coupling of the polysaccharides to protein carriers.

To date, the only conjugate vaccine that has been produced and licensed for protection against bacterial meningitis is the Hemophilus b Conjugate Vaccine. This vaccine is presently recommended for routine use in children 18 months to 6 years of age, and may soon be approved for use in infants, depending upon results of ongoing efficacy trials. The mechanism by which an Hemophilus b conjugate can stimulate infants to respond to the polysaccharide, when the polysaccharide alone is unable to do so, is poorly understood. Further immunological studies are required.

There are licensed polysaccharide vaccines for the four groups of meningococci and 23 of the types of pneumococci, but these vaccines are not effective in young children who are most susceptible to meningitis. Some work is underway to evaluate the use of polysaccharide-protein conjugates for some of these organisms. However, polysaccharide vaccines have not been shown to be immunogenic for Group B meningococci and other approaches are being evaluated for prevention of this disease. Protection against neonatal group B streptococcal invasive disease, including meningitis, may also be possible with conjugate vaccines; the polysaccharides of the four types of Group B Streptococci do not appear to be sufficiently immunogenic. The prevention of this disease; however, may require immunization of pregnant women, an approach which may be problematic.

Besides preventing meningitis, development of an effective multicomponent pneumococcal conjugate vaccine could also provide protection against pneumococcal ear infections, called otitis media. Approximately half of all children will experience one or more bacterial ear infections by the age of 2 years. Approximately one-third of these are due to pneumococci and consume a very significant portion of the health care expenditures.

An evaluation of the efficacy and safety of any of these new types of products will be required; such studies are complex, require large numbers of volunteers, and are expensive to conduct.

Mr. Conte: Are you working with the FDA in the vaccine development and approval process?

Dr. Mason: The NVP, through its Vaccine Interagency Group, is working closely with FDA, PHS and other agencies to facilitate the processes involved in research and development in many vaccine areas. In general, vaccine development is principally the responsibility of the NIH. However, many agencies perform research in areas related to vaccine development. For example, the FDA's laboratories have been extensively involved in research related to the development of viral and bacterial vaccines for a number of years. Although other agencies in PHS, such as NIH and CDC, may contribute to the development activity, FDA has the primary responsibility for the approval process.

As an example of activities related to the development process, FDA's Laboratory of Pertussis has made significant contributions to our knowledge of many of the virulence factors isolated from B.pertussis. It has also developed many of the models for studying these factors in the laboratory and evaluating the immune response to these factors. To accelerate this research, NVP has provided additional human and financial resources to the FDA for ongoing basic and applied research such as elucidation of mechanism of pathogenesis, analyze candidate vaccines, develop improved diagnostic methods, and methods to evaluate immunity. In addition, NVP provided additional resources to NIAID to evaluate candidate acellular pertussis vaccines in clinical studies. It is anticipated that such studies will provide information needed to FDA to support the approval of new vaccines.

Mr. Conte: Have their recent troubles with staffing caused any delay at looking at these new vaccines?

Dr. Mason: FDA has been able to review the Investigational New Drug (IND) submissions and the license applications for vaccines directed at preventing meningitis and pertussis with the existing staff although it has required dedicated diligence and long hours of extra effort on the part of the reviewers to assure that products can be approved when we believe that adequate data has been submitted. Additional resources have been requested in FY 1991 to facilitate the review of these new vaccines. The development of new vaccines can be expected to lead to an increased number of complex applications which will require either new resources or reassignment of existing staff for this review.

SUBSTANCE ABUSE

Mr. Conte: Dr. Mason, as Assistant Secretary for Health, you must be extremely concerned about the proliferation of drugs. It seems every week there's a new drug invading this country. Do you have any plans to work with ADAMHA and Bill Bennett's office to come up with some workable solutions to the drug problem?

Dr. Mason: Yes, we have worked on formulating and coordinating National Drug Control Strategies I and II with the Office for National Drug Control Policy (ONDCP). We have been involved in the development of implementation plans to meet the goals of Strategy I and II; and we are entering discussions on the development of Strategy III. In addition, ONDCP has a number of committees and subcommittees on demand reduction on which staff from both PHS and ADAMHA are members.

PEDIATRIC AIDS

Mr. Conte: Dr. Mason, what will your office be doing to coordinate efforts at preventing pediatric AIDS?

Dr. Mason: In December 1989, PHS established the Panel on Women, Adolescents and Children with HIV Infection and AIDS to coordinate PHS activities relating to women and children with AIDS. This panel is the successor to the work group on HIV infection in women and children established by former Secretary Bowen in 1988. The Panel is currently working to coordinate implementation of the more than 40 recommendations from the work group report. The new panel is co-chaired by the Dr. James R. Allen, Director of the PHS's National AIDS Program Office and Dr. Antonia Novello, the Surgeon General.

Mr. Conte: How much is the Department requesting for pediatric AIDS throughout the Public Health Service?

Dr. Mason: The PHS is requesting approximately $155 million for FY 1991 specifically for pediatric efforts. Additionally, investments in other areas such as vaccine and therapeutics, education, surveillance, and prevention will produce benefits applicable to pediatric HIV and AIDS.

Mr. Conte: Would you submit for the record, a breakdown of the budget request at PHS for pediatric AIDS?

Dr. Mason: A breakdown of our request for funds specifically-targeted toward pediatric HIV and AIDS is:

(Dollars in Thousands)	
HRSA:	
Pediatric AIDS Service Demonstration	$14,803
CDC:	
Pediatric AIDS Surveillance	1,520
Perinatal Transmission Studies	3,520
Perinatal Prevention Demonstrations	21,993
Natural History	3,325
Neonatal Seroprevalence Studies	14,100
Subtotal, CDC	44,458
NIH:	
NCI	10,200
NHLBI	5,060
NINCDS	1,491
NIAID	36,924
NICHD	24,500
DRR	3,296
NCNR	150
Subtotal, NIH	81,621
ADAMHA:	
NIDA	3,900
NIMH	9,840
Subtotal, ADAMHA	13,740
Total, PHS	$154,622

NATIONAL AIDS PROGRAM OFFICE

Mr. Conte: What will the National AIDS Program Office be doing to tackle the problem of pediatric AIDS?

Dr. Mason: The National AIDS Program Office (NAPO) is the PHS's chief coordination point for all HIV and AIDS issues. Programs are directly operated by the Agencies with the coordinative assistance of NAPO. The Panel on Women, Adolescents, and Children with HIV Infection and AIDS has been formed and is co-chaired by Dr. James R. Allen, Director of the NAPO. Executive staff support of the Panel is provided by members of the NAPO.

Mr. Conte: Will the program office be responsible for recommending spending priorities among the Agencies involved in AIDS?

Dr. Mason: The National AIDS Program Office (NAPO) reviews budget submissions and analyzes program proposals which have been prepared and presented by Agencies. Agencies, within their own realm, establish their proposed priorities. The NAPO reviews the proposed budgets with an eye toward avoiding duplication; where there is legitimate similarity in efforts, NAPO tries to assure sharing of information and recommends coordinative efforts which enhance the value of programs.

Mr. Conte: Is the high cost of AZT and AIDS-related medication on the agenda of the program office?

Dr. Mason: The National AIDS Program Office (NAPO) has been involved in discussions regarding this issue. While we do not have authority to take direct action, as a result of discussions in which NAPO participates, the manufacturer of AZT has significantly reduced the price over the past several months. NAPO will continue to promote open channels of discussion between PHS and producers and marketers of AIDS-related pharmaceuticals.

Mr. Conte: The cost of AZT is still prohibitive - even with the decreased dosage recommendations, the minor price reduction by the manufacturer, AZT costs over $6,500 per year for a full case of AIDS and $2,700 for those infected but not ill. Doctor, can you give us some idea as to the income level distribution of those infected with HIV and those from AIDS?

Dr. Mason: CDC has a pilot project in a small number of areas to provide restricted data on income when reporting newly diagnosed cases. There are no completed studies which provide this information.

MEDICAL PRACTICE GUIDELINES AND STANDARDS

Mr. Conte: Dr. Clinton, your agency will be responsible for the development of medical practice guidelines and standards. In what ways should guidelines be developed so that clinical decision making is made more rational and effective?

Dr. Clinton: The quality and integrity of the process for developing guidelines is critical. It determines both their usefulness and the likelihood of their acceptance by patient and physician. Credibility is enhanced if guidelines are developed through a rigorous, structured process that synthesizes the information in the scientific literature, extends it through the knowledge of expert physicians, and expresses the information in statements that are specific, precise, and comprehensive.

Where possible, guidelines should be based on scientific evidence of effectiveness outcomes. The ideal standard is the randomized clinical trial. Unfortunately, there are few outcomes for which such trials have been conducted. In the absence of hard scientific data investigators have turned to less precise methods such as structured synthesis of evidence using meta-analysis or decision analysis, and use of expert opinion. A suitable method of synthesizing evidence and extending it by expert clinical opinion for the development of practice guidelines should include the following characteristics:

- o Use of available scientific data in the literature which are critically analyzed and synthesized to provide usable evidence of effectiveness.

- A selection process for experts for consensus panels that minimizes bias and ensures appropriate representation.
- A panel process that maximizes exchange of ideas and minimizes dominance by individuals.
- A panel process that includes explicit consideration by panelists of outcomes probabilities and risks when making their judgments of appropriateness.
- Assurance that results of the process meet the criteria for good guidelines, i.e., they are comprehensive, specific, detailed, and inclusive and they distinguish between appropriate and inappropriate.
- Assurance that process results are reproducible, i.e., duplicate panels would achieve similar results.
- Acceptability to all interested parties--patients, physicians, regulatory authorities, hospitals, and payers.
- Practicality, i.e., it can be replicated for a large number of operations at reasonable expense.

Practice guidelines thus represent a marriage of evidence, experience, and opinion with the view toward outcomes that ultimately are important to the patient.

Mr. Conte: Do you think these guidelines could be useful for consumer groups as well?

Dr. Clinton: Ideally, decisions about medical practices should be made between physicians and their patients, with each decision tailored to fit the patient's problems and desires. This must explicitly involve the discussion of outcomes of medical care that are important to patients. However, to achieve this ideal, both physician and patient must have reliable, comprehensive information about the consequences of different choices and must be able to process that information accurately.

Guidelines should not be developed in isolation from other initiatives to modify inappropriate practice. Consumer groups have a major role to play in the development, dissemination, use, and evaluation of practice guidelines.

Mr. Conte: How will you disseminate these guidelines so that they are used, and not ignored, by the medical community.

Dr. Clinton: The Agency's Medical Treatment Effectiveness Program (MEDTEP), which includes the development and dissemination of practice guidelines, will provide information that physicians want and need. We are working closely with the relevant health professions societies to develop these guidelines and we will work with them to ensure effective dissemination of our collaborative efforts. Strategies to disseminate scientific information to practicing clinicians will be geared to achieve positive change in physician behavior. Studies have shown that this can be attained by providing physicians with nonthreatening, educational feedback in a collegial setting and by continuing to reinforce the message.

The AHCPR has arranged selected announcement and publication of findings by professional journals. For example, we now have a monthly column in the Journal of the American Medical Association (JAMA) to highlight results of guideline development, patient outcome research, and other research of interest to physicians. We are arranging for announcement or publication in key nursing journals of recommendations on nursing guideline development created through a recently convened ad hoc committee of nurse clinicians, educators, and policymakers.

The AHCPR also is working with other agencies and organizations skilled in the dissemination of information to clinicians, particularly staff of the Health Resources and Services Administration (HRSA). The HRSA will assist in the assimilation of the results of medical effectiveness research and practice guidelines into medical practice. This will be facilitated by HRSA's long-standing support of medical education and curriculum development.

The MEDTEP emphasizes the dissemination of findings to health care providers and all potential users of the information. The Agency is seeking innovative dissemination plans that include developing information into different formats for different audiences. Dissemination strategies also will be evaluated to determine effects on physician and patient behavior. The doctor/patient relationship should actually improve with a more informed patient who better understands the complexity of the clinical decisionmaking process and can ask questions that help to guide the clinician.

YEAR 2000 HEALTH OBJECTIVES

Mr. Conte: We have ten years left in this millennium. We as a nation have seen tremendous changes in our century in improving the health of our people. But so much remains to be done. The Year 2000 health objectives program is an appropriate vehicle to look at what needs to be done to improve the health of the disadvantaged, the poor, the homeless, the elderly, and minorities. What will the Office of Disease Prevention be doing to implement the Year 2000 health objectives?

Dr. Mason: One of the most important steps toward implementation began with the planning process for developing the objectives, with the formation of a consortium of national membership organizations and State health departments to participate in that process. During the course of developing the year 2000 objectives, the consortium has met semiannually and had an essential role in ensuring broad participation. It has become clear that the success of implementation will depend heavily on the continued work of the consortium. For this purpose, PHS is discussing with the consortium at its March 1990 meeting the feasibility of continuing its existence in order to provide mutual support among members as they undertake to implement parts of the objectives relevant to their organizational missions or States' priorities.

In addition to the consortium, the Office funded projects in FY 1989 to begin planning implementation strategies for specific population groups or settings. The following Year 2000 Health Objectives cooperative agreement projects were funded for the following groups or purposes:

National Medical Association for Black Americans
National Coalition of Hispanic Health and Social Services Organizations (COSSHMO) for Hispanics
Asian American Forum for Asian Americans
American Indian Health Care Coalition for American Indians

American Association of School Administrators for Children/Schools
American Medical Association for Adolescents
American Association of Retired Persons for Older Adults
Washington Business Group on Health for Employees at Worksites
National Civic League for Healthy Cities/Healthy Communities
United Way of America for Community-Based Service Organizations
American Association of University Affiliated Programs for People with Disabilities

These organizations have begun initial plans for developing implementation strategies for their groups/purposes. Some of their planning will be unveiled at the time of release of the objectives in September 1990.

The Office will initiate in 1991 the management/progress review system, using the year 2000 objectives, that has served as a tracking and management oversight tool during the course of the 1990 Health Objectives for the Nation. Periodic reports to the Nation on the status of the objectives are planned through the triennial "Prevention Profile" sections of *Health United States* and through a mid-decade complete review similar to *The 1990 Health Objectives for the Nation: A Midcourse Review*, published in 1986 to review the status of the 1990 objectives.

Mr. Conte: These health and prevention goals have been evolving for quite some time. Can you share with us any major changes in the making on some of these goals?

Dr. Mason: There are a number of ways that the year 2000 objectives and goals differ from those set for achievement by 1990. First, we are giving much higher priority to the needs of population groups at highest risk of premature death, disease, and disability. Depending on the specific health issue (e.g., nutrition, smoking behavior, pregnancy outcomes, infectious diseases, chronic diseases), particular minority, age, or income-level subpopulations may be disproportionately at risk. The year 2000 objectives focus on those groups whose health profiles call for most improvement.

Second, we are making an attempt in the year 2000 objectives to shift the focus of our measurement of health status from one largely defined by death rates to include more attention to morbidity and disabling impairments, recognizing that prevention is much more than just avoidance of premature death and the measurement of prevention's effectiveness has to focus on reducing the occurrence of disease and injury that result in long-term, chronic suffering as well as death.

Third, the year 2000 objectives contain priority areas that were not addressed in the 1990 objectives, including HIV infection, mental health, surveillance and data systems, health education and preventive services, cancer, and food and drug safety.

Finally, I believe that we will be producing a set of objectives for the year 2000 that adhere to the principle of measurability more effectively than did the ones that we developed for accomplishment by 1990. We learned over the past decade that one of the powerful aspects of this goal- and objective-setting effort has to do with measurement of progress, or lack of progress, and resulting effects of such measurement on programmatic and resource allocation decisions.

Mr. Conte: Is there an effort being made to see whether we are making progress towards the year 2000 goals?

Dr. Mason: We will not publish the final set of year 2000 goals and objectives until September 1990, so we have not yet begun to track progress toward their accomplishment. We will, however, use the year 2000 objectives as a classic management-by-objective tool. I will hold regular progress reviews on the priority areas. We will publish periodic "health audits" that provide updates on what progress or lack of progress is occurring as we move toward the year 2000.

NUTRITION AND HEALTH

Mr. Conte: Dr. Mason, you mentioned in your written statement that implementing key provisions of the Surgeon General's Report on Nutrition and Health is going to be a priority of your office. Can you share with us what recommendations will you be pursuing from the Report?

Dr. Mason: We have already begun several initiatives to implement recommendations contained in the Surgeon General's Report on Nutrition and Health. Among these are:

- A major review of food labeling policy, undertaken by the Food and Drug Administration, in collaboration with the U.S. Department of Agriculture. Part of this review engages the Food and Nutrition Board, Institute of Medicine of the National Academy of Sciences, to make recommendations regarding food labeling policy reform. Work has been going on related to this initiative since the early weeks following release of the Surgeon General's report. Recently, Secretary Sullivan announced the major outlines of the careful plan we are engaged in implementing to make food labels reflect the current state of knowledge regarding diet and disease.
- A project undertaken in cooperation with the American School Food Services Association to encourage schools to provide breakfast and lunch programs that reflect the major dietary recommendations contained in the Surgeon General's Report.
- Continuing collaboration with the U.S. Department of Agriculture to improve the quality of data on the nutritional status of the American population as a means of focusing dietary guidance and food policy more effectively.
- A market research study to learn better how to communicate about diet, physical activity, and weight control with low-income population groups. The findings from this study will be used to shape more effective public education programs that seek to reduce the prevalence of diet-related chronic diseases in the American population.

MINORITY HEALTH

Mr. Conte: The budget is asking for a $12 million increase, for a total of $20 million, to strengthen minority health programs. $10 million of this increase would go to the Secretary's minority health improvement initiative, including the community coalition demonstration grants. What will be the criteria for selecting a particular community for the community coalition grants?

Dr. Mason: To be eligible to receive funding under the community coalition grant program, applicants must be a coalition of organizations and institutions within a community which have come together to promote disease risk reduction efforts among minority populations of that community. In making grant awards, the Office of Minority Health will attempt to achieve equitable geographic and ethnic distribution of awards as well as cover the various health problems identified in the Task Force Report. There is no lower limit for the size of the population targeted by the applicant, but there must be a reasonable relationship between the level of effort involved in the coalition and the size of the target population and the health problem(s) to be addressed. Similarly, the geographic distribution of the target population must be such that effecting risk factor reduction is feasible.

Mr. Conte: What effort is being made to coordinate minority health objectives among the several agencies involved?

Dr. Mason: There are several mechanisms by which the Office of Minority Health (OMH) is coordinating minority health objectives. Foremost is the DHHS-wide coordinating process in which the OMH is developing a minority health strategic plan. This plan contains short-and long-range objectives encompassing all Public Health Service (PHS) activities related to minority health. PHS agencies are intimately involved in the development and finalization of this plan.

The OMH has also been involved in formulating and reviewing the Year 2000 Objectives for the Nation which contains objectives relevant to minority populations and their health status. OMH staff also interact on a one-on-one basis with PHS agencies and other entities within the Department to implement these objectives.

PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS

Mr. Conte: What new initiatives will the Council be doing to improve public awareness of physical fitness in the coming year?

Dr. Mason: The President's Council on Physical Fitness and Sports (PCPFS) works closely with numerous organizations, but especially with the State Departments of Education and the Governors' Councils on Physical Fitness and Sports. PCPFS will continue to work with them and increase cooperative efforts at the grass-roots level. Some specific new initiatives which the Council will introduce to improve public awareness of physical fitness in the coming year include, but are not exclusive to, the following:

Creation of State and Local Councils on Physical Fitness and Sports. We presently have 31 Governors' Councils on Physical Fitness and Sports. A local council on physical fitness and sports, made up of influential citizens, can do much to advance physical fitness in its populace for all of the ages. If we can advocate the need to reinstate physical fitness as a priority in our schools to the local officials, then perhaps we can reverse the trend when budgets get tight to reduce funding for quality physical education. These councils can also inform and educate the community on the benefits of being physically fit.

The Goodwill Games and Sports Illustrated for Kids is a new joint project which will promote the President's Challenge Fitness Award Program and the Goodwill Games. Turner Broadcasting System will produce three versions of a promotion spot featuring a prominent Goodwill Games athlete informing youngsters of the importance of physical fitness. The spots will air a minimum of 40 times over a 3-week period. The Sports Illustrated for Kids magazine will devote two pages of its magazine to the President's Challenge. Among other things, both organizations will promote and fund a sweepstakes with one family and one physical education teacher getting an all-expense paid trip to the Goodwill Games in Seattle.

National Summer Youth Fun and Fitness Program is a program designed for youth ages 6 through 12 encouraging summer participation in a variety of fitness activities over a 6-week period. Held on a pilot basis in 9 cities in 1989, this program will be launched this year in approximately 500 cities.

We are seeking to have May redesignated officially as National Physical Fitness and Sports Month. A major promotional effort is planned for 1990 to "Salute a Fit America". Schools, park and recreation departments, employee associations, YMCAs, government and other agencies are encouraged to conduct special events throughout the month to call attention to local fitness programs and services.

From 4 to 6 Regional Physical Fitness and Sports Clinics are held annually at various sites around the country. These 2-day clinics include hands-on leadership instruction in testing and evaluation, school physical education activities, lifetime sports, soccer, volleyball, jogging, tennis, and exercise for older adults and the physically handicapped.

TANG and the President's Council will join together in 1990 to create and promote a National Youth Fitness Awareness Campaign.

In addition to conducting several seminars and workshops focusing on health/fitness issues affecting Native Americans, the Council has joined the Secretary's Health Promotion Initiative which is preparing a campaign to promote health and fitness particularly among low income/minority populations.

Multifaceted public service campaigns promoting key fitness messages excite and encourage Americans of all ages towards physically active lifestyles. These include live television spots, radio spots, and print advertisements. When possible, we encourage that these be done in Spanish also. This year's public service campaign will be based for the first time on "Family Fitness".

The PCPFS will take the lead role in monitoring progress toward the attainment of physical activity and fitness objectives in the Year 2000 National Health Objectives. This is an intensive effort to improve the physical fitness status of all Americans conducted in cooperation with public offices and private sector organizations.

The visibility of the President's Challenge Fitness Award Program will be increased through exhibits at appropriate professional conferences, articles in professional journals, and increased media campaigns. This awards program recognizes students, ages 6-17, who demonstrate exceptional physical achievement (Presidential Physical Fitness Award) or meet a basic yet challenging level of fitness (National Physical Fitness Award).

RETIREMENT PAY

Mr. Conte: Dr. Mason, The budget proposes to convert the Commissioned Corps Retirement system to an accrual-based system. Your budget states that this change will increase budget authority and outlays for the corps in the short run, but will not affect the level of benefits received or the total program outlays.

Why is this change being proposed?

Dr. Mason: New legislation for the Commissioned Officers retirement fund has been proposed in order to keep it in line with the recent changes that have occurred to both the military and civilian federal retirement systems. Both funds have been converted to accrual-based systems designed to improve the financial management of the government.

Under the current system, Congress annually appropriates such sums as necessary to make payments to those officers currently in retirement status. There are no provisions for payments into the account for officers who are active. This presents a liability problem that the administration wishes to alleviate. The current unfunded liability is estimated to be $3.9 billion. The new system is being patterned after the military system which is now in operation.

Mr. Conte: What is the advantage of an accrual-based system?

Dr. Mason: Under the accrual-based system, an amount of money will be annually placed in a special fund administered by the Department of Treasury based on actuarially determined costs of future retired pay of officers currently on active duty. This payment will cover future projected retirement costs for those officers.

Also, like the Department of Defense (DOD) military retirement fund, special arrangements would have to be made to cover the unfunded liability that has already accrued. In DOD, this unfunded liability is amortized over a 60-year period. Each year, and for the next 60, the Department of Treasury will transfer an actuarially-determined amount of money into the military retirement fund. The main advantage to the accrual-based system is that the unfunded liability will ultimately be eliminated.

FAMILY PLANNING GRANTS

Mr. Stokes: If the Congress continues to appropriate funds for Title X program to the HRSA account and continues to fund the program as a discretionary grant program, will the Department attempt to remove the authority to award grants from the regional administrator?

Dr. Mason: Over the past two years, a number of operational decisions have been made in some PHS programs and agencies which have implications for the program management roles of the Regional Health Administrators. Although there has been consideration of related changes for the Title X program, no final decision has been made. I should note that some HRSA programs have already been affected by Congressional decisions to substantially decrease the role of Regional Health Administrators in the approval of HRSA grant programs.

ADOLESCENT SEX SURVEY

Mr. Stokes: Please bring me up-to-date on the status of the adolescent sex survey that was to be undertaken by the National Institute of Child Health and Human Development by means of a research grant. I know that your office and NICHD are trying to address some concerns before finalizing the award. Why would this type of survey be useful?

Dr. Mason: The American Teenage Study promises a major advance for research in the area of adolescent pregnancy, and will provide information crucial to understanding how and why adolescents put themselves at risk of AIDS and other sexually transmitted diseases. Building on more than two decades of research into the determinants of adolescent pregnancy, the study will significantly expand our understanding of pregnancy risk behaviors by examining adolescent behavior in the contexts in which it occurs: in the context of family and parental influence, the school environment and the peer friendship networks, the neighborhood and larger community, as well as in the context of the adolescent's own characteristics, values and aspirations. With its innovative design and large sample size, the study will provide the opportunity to examine and test a broad range of hypotheses that have been advanced to explain adolescent risk-taking behaviors. The data set resulting from the study is expected to provide a resource for researchers studying adolescent pregnancy for years to come. The study will also provide important information on behaviors that place adolescents at risk of AIDS and other sexually transmitted diseases, and contribute to the design and targeting of intervention programs.

Mr. Stokes: What concerns still need to be addressed?

Dr. Mason: The American Teenage Study will adequately explore the behaviors that put adolescents at risk for AIDS, other sexually transmitted diseases, and pregnancy.

Mr. Stokes: When is this grant likely to be awarded?

Dr. Mason: The proposed study is currently under review in my office. NIH review of the proposal study was completed during the summer of 1989, and consisted of a scientific peer review and site visit, policy review by the NICHD advisory council, and fiscal review by business management staff. I expect that an award will be made in FY 1990.

MINORITY PARTICIPATION IN TRAINING AND RESEARCH PROGRAMS

Mr. Stokes: Last year the Committee expressed its concern over the low level of participation of minority institutions in the training and research programs of the PHS. We directed the Office to develop a plan to increase minority participation in these programs, using the Office of Minority Health in this effort. What progress have you made in this regard?

Dr. Mason: The Office of Minority Health (OMH) has played a major role in developing and implementing activities associated with the Historically-Black Colleges and Universities (HBCU) initiative. The objective of this initiative is to strengthen and expand opportunities for HBCUs to participate in Federally sponsored programs. The Office of Minority Health has provided, and will continue to provide, support to the Departmental coordinator of this initiative. In addition, the OMH conducted two technical assistance workshops on grants and contracts proposal development and requirements of PHS sponsored programs. These workshops were specifically designed to stimulate grant and contract applications from minority institutions, encourage HBCU faculty members to apply for support sponsored by PHS agencies and to increase their capability to compete successfully for PHS grants and contracts. Faculty members from over 70 HBCUs attended the workshops. The Office will expand this effort to include institutions comprised predominantly of other minority populations, e.g. Asian/Pacific Islander, Hispanic and Native American.

COST AND FINANCING OF CARE OF AIDS PATIENTS

Mr. Stokes: Can you tell us what percentage of the Public Health Service's AIDS budget is targeted toward pediatric AIDS?

Dr. Mason: In FY 1991 the PHS will spend approximately $155 million directly on pediatric HIV/AIDS activities. This is an increase of $29 million, or 23 percent, over FY 1990. In comparison, the overall PHS HIV/AIDS budget will increase by approximately 7 percent. Funds specifically ear-marked for pediatrics represent slightly more than 9 percent of the HIV/AIDS budget. It is important to bear in mind that all other PHS HIV/AIDS efforts have beneficial, additive effects upon our targeted pediatric endeavors. For example, the funds invested to discover a vaccine or more effective treatments will be applicable to pediatric cases. This is equally true for our investment in education, surveillance, and prevention activities.

Mr. Stokes. Last year, I asked whether the department had been looking at the cost and financing of the care of AIDS patients. In Dr. Dickson's response for the record, he listed several studies undertaken by the National Center for Health Services Research. Has the Public Health Service incorporated any of these findings into your policy making? I note that four AIDS programs with the Health Resources and Services Administration have been eliminated -- AZT grants, home health service grants, subacute care grants, and pediatric health care demonstrations.

Dr. Mason. The AIDS research program of the former National Center for Health Services Research and Health Care Technology Assessment (NCHSR) is being continued by the recently established Agency for Health Care Research and Policy (AHCPR). In FY 1990, the AHCPR will fund approximately 12 grants and continue funding one major contract related to AIDS cost and financing issues.

The select findings which were listed by Dr. Dickson last year represented a few small scale projects that were limited somewhat in scope. For example, the grant entitled, "The Cost of Treating AIDS Patients in San Francisco," was limited to a small sample of homosexual/bisexual men receiving care in one city. The cited study conducted by NCHSR's Dr. Fred Hellinger, which projected total national direct medical costs of AIDS through 1992, focused on AIDS patients only. It represented a synthesis of information which existed at the time of the study. Unfortunately, the available information often excluded important data in areas such as unmet needs, long-term care costs, home care resource utilization, and cost of pharmaceuticals other than AZT.

Given the need for generalizable and comprehensive research, the former NCHSR expanded its health services research program in FY 1989. Since the majority of studies currently being supported by AHCPR were initiated in FY 1989 and require primary data collection, research results that would be useful to policymakers are, by in large, not available yet. However, the contract cited last year in Dr. Dickson's response, "Development of Research Protocols to Study the Costs Associated with ARC and AIDS," did produce a series of research methodologies. One of these, "Estimating the Use and Costs of Medical and Social Support Services for Persons with HIV-Related Illnesses," has been used as the basic design for a major data collection activity now being conducted by AHCPR. This activity, entitled the AIDS Cost and Service Utilization Survey (ACSUS), was funded at the end of FY 1989.

The ACSUS will yield data that can be used for policymaking. It will collect uniform, longitudinal data on the cost and financing of care, as well as data on quality of life, functional status, and access to care from symptomatic and asymptomatic HIV seropositive individuals. The data, which will be collected at diverse geographic sites from persons from various exposure categories and socioeconomic backgrounds, will cover both inpatient and outpatient care. In addition, it will provide data on mental, dental, and social service support costs.

SEXUALLY TRANSMITTED DISEASES

Mr. Dwyer: One of the major priorities of the Public Health Service is the prevention of disease and the promotion of good health practices. It is my understanding that the incidence rate for sexually transmitted diseases continues to climb. What initiatives are currently underway to curb this trend?

Dr. Mason: It is correct that the incidence rate for sexually transmitted diseases continues to climb. The most efficient method for the prevention of STD and its subsequent complications remains a partnership of Federal, State, and local governments, private medicine and voluntary organizations. The Centers for Disease Control (CDC) supports this partnership through direct financial assistance to State and selected local health authorities, through national disease surveillance activities, through applied research and through national STD leadership activities. CDC makes grants to all of the States to support disease monitoring, screening, partner referral services and other outreach efforts. CDC further conducts applied research efforts directed toward further characterizing the pathophysiology, host response, epidemiology, and behavioral aspects of these diseases to permit the development of improved diagnostic prevention and control methodologies. Specific initiatives related to the increasing trends include the following:

1. To address the issue of increases in infectious syphilis, the program announcement for STD grants for FY 1990 specifically addresses the importance of targeting prevention and control activities for syphilis to the 35 highest morbidity areas of the Nation. In addition, special demonstration funds have been awarded under Section 318(b) of the Public Health Service Act to the City of Philadelphia to provide outreach for early syphilis to the highest morbidity districts within the city. These activities should address the areas of increase since almost two-thirds (63%) of the syphilis reported will be seen in these highest morbidity areas.

2. For resistant gonococcal infection, the 1989 Treatment Guidelines have recommended a significant change in the therapy recommendations for the treatment of gonococcal infections from penicillin to Ceftriaxone. The recommended dosages, which are relatively high, may also delay the emergence of Ceftriaxone-resistant strains. Since these are oral dosages and appear highly effective for gonococcal infection, this should adequately address the problem of increases in resistant gonococcal infection.

3. Since 1985, Federal, State, and local STD officials have made substantial advances in developing prevention and control programs for chlamydia. Currently, 42 States have at least one city or country STD program that offers comprehensive surveillance, diagnostic, testing, and treatment services. Three States enacted laws requiring the reporting of chlamydia during 1989, bringing the total with such laws to 33 States. In 1989, over 60,000 patients with chlamydia infection were interviewed regarding their sex partners, and nearly 50,000 sex partners were referred for examination. Over 1.4 million women were screened for chlamydia with 14% found to be positive. As a result of these activities, over 80,000 potential cases of genital chlamydia infection were prevented.

4. Specific behavioral interventions to reduce unsafe sexual behavior has had mixed success. To date, the only group

which has markedly reduced its unsafe sexual behaviors has been white men who have sex with other men. During the 1980's, sharply decreasing rates of syphilis, gonorrhea, hepatitis B and enteric infections in this group attested to the behavioral impact of HIV and STD prevention messages. However, in other groups, STD trends imply that safer sexual behaviors have not yet been adopted. The increasing trends in STD among low income, urban, minority heterosexual populations indicate that State and local public health officials need to better target their STD/HIV prevention messages to those populations at highest risk in an effort to reduce unsafe behaviors. In FY 1991, CDC has an initiative of $4,054,000 to assess the effectiveness of street outreach in reducing rates of HIV infection in intravenous drug users (education) and their sex partners. Street outreach teams have been widely implemented in community-based HIV prevention programs. These teams provide face-to-face education on HIV prevention transmission, safer sex practices and contraception.

REDUCTION OF FTES

Mr. Dwyer: OASH has requested $139.135 million for the Title X family planning programs, transferring this program from HRSA. While this is the same amount as the fiscal year 1990 appropriations, the budget request contains a dramatic decrease in the number of FTEs for this program. Why is it necessary to reduce FTEs by 35?

Dr. Mason: This reduction reflects the decreased need for Federal administrative staff under the State-administered family planning proposal. All funds saved through transfer of staff from the Title X account would be allocated to the States for provision of program services. It would be our intention to avoid reductions in force through transfer of Title X administrative staff to other programs.

NATIONAL VACCINE PROGRAM

Mr. Dwyer: Vaccination should be a key element of any prevention program. Unfortunately, an enormous number of American children and adults remain unprotected against a variety of infectious diseases. In 1989, measles epidemics sprung up on college campuses all over the country. What new initiatives will OASH undertake to ensure that all eligible children and adults be immunized for measles, pertussis and other infectious diseases.

Dr. Mason: In addition to the specific NVP FY 1990 appropriation, which emphasized research into the development of a safer pertussis vaccine, Congress provided funding for three other vaccine activities through the CDC. These included nearly $8 million to support the development of assessment and intervention activities to increase age appropriate immunization levels, particularly in inner cities and socioeconomically disadvantaged areas; approximately $8 million in grant funds to support local efforts to screen pregnant women for hepatitis B antigen and provide hepatitis B vaccine and hepatitis B immunoglobulins to the offspring of women found to be carriers; and $9.9 million to support measles outbreak control activities. All of these activities have been maintained in the FY 1991 President's budget request.

MEDICAL TREATMENT EFFECTIVENESS RESEARCH

Mr. Dwyer: Recently, concerns have been raised that women have been severely underrepresented in biomedical research. Women have not been included in many medical studies, including the famous aspirin/heart disease study. Will the Agency for Health Care Policy and Research (AHCPR) be examining this "deficit?" In addition, how will the AHCPR assess the effectiveness of recent medical treatments for women, if women were not included in any studies?

Dr. Mason: The Agency for Health Care Policy and Research (AHCPR), through its Medical Treatment Effectiveness Program (MEDTEP), will examine the appropriateness and effectiveness of treatment strategies for all patients, including women.

A significant portion of MEDTEP research is performed by Patient Outcomes Research Teams (PORTs), which follow similar methods. The first step for these PORTs is to review the available literature for the condition under study. This should identify any deficit of research on women. The next step involves claims data analysis to fill any gaps, which could compensate for such a deficit, if present. The Medicare program, which has nearly 60 percent women beneficiaries, will provide a major source of claims data for these analyses of the effectiveness of medical treatment. Should additional data need to be collected to obtain more data on women, the PORTs would be prepared to do so. Other PORT steps require dissemination of research findings and evaluation of their effect on practice behavior.

Together with other AHCPR-supported health service research on medical treatment effectiveness, MEDTEP will be able to compensate for any possible underrepresentation of women in biomedical research. For example, AHCPR has funded an assessment of outcomes after hysterectomy. The Agency also expects to support studies of the effectiveness of medical treatments for other conditions and procedures of major importance to women, including breast cancer, caesarean section, and low birthweight infants.

Mr. Dwyer: The purpose of the AHCPR is to enhance the quality, appropriateness, and effectiveness of health care services by establishing a broad base of scientific research and by promoting improvements in clinical practice. While we have an obligation to use evaluations of current practices as a tool to improve health care delivery, what will AHCPR do to insure that its evaluations do not have a chilling effect on either the doctor/patient relationship or the choice of a therapy, which may not be the one recommended by AHCPR, by the physician?

Dr. Mason: There are several reasons why AHCPR-supported research on the quality, appropriateness, and effectiveness of health care services will not have a "chilling effect" on the doctor/patient relationship, or the physician's choice of therapy.

o AHCPR research, through its Medical Treatment Effectiveness Program (MEDTEP), will provide the scientific information that physicians want and need. Clinical decisions often must be made under circumstances of uncertainty regarding likely outcomes. When more than one treatment alternative is available and the outcomes are difficult to predict, variations in physician practice result. MEDTEP's scientific study of the outcomes of particular services and treatments will help reduce clinical uncertainty and remove the basis for inappropriate practice variation.

- The guidance that results from MEDTEP research may validate conventional medical wisdom, or it may suggest that physicians rethink their practice patterns. However, in the final analysis, a physician will always have to weigh the guidance provided by AHCPR-supported research against the actual symptoms and health status of the patient being treated.

- The development of clinical practice guidelines based on scientific research findings involves guidance, not "cookbook" medicine. Moreover, these guidelines will be developed collaboratively with the relevant health professional groups.

- Strategies to disseminate scientific information to practicing clinicians will be geared to achieve positive change in physician behavior. Earlier work has shown that this can be attained by providing physicians with nonthreatening, educational feedback in a collegial setting and by continuing to reinforce the message. AHCPR intends to work with others skilled in this dissemination of information to clinicians. Dissemination strategies will also be evaluated to determine effects on physician and patient behavior.

- MEDTEP emphasizes wide and timely dissemination of research findings to all potential users of the information, including the patient. The doctor/patient relationship should actually improve with a more informed patient who better understands the complexity of the clinical decisionmaking process and can ask questions that help to guide the clinician.

AIDS IMMIGRATION

Mr. Hoyer: Two recent developments regarding U.S. policy toward foreigners seeking entry into the U.S. recently occurred: The INS no longer places an identifying stamp on the passports of persons with AIDS who have been granted a waiver to travel in the U.S., and; the CDC recently reviewed and made a recommendation that AIDS and all other contagious diseases except tuberculosis be removed from a list of illnesses that bar entry into the country. Is it the case that these recommendations will be published in the Federal Register. and if so what will be the impact?

Dr. Mason: A Notice of Proposed Rulemaking to remove chancroid, gonorrhea, granuloma inguinale, lymphogranuloma venereum, infectious syphilis, and infectious leprosy is currently under consideration. This proposal would modify 42 CFR Part 34.2(b), Medical Examination of Aliens, by deleting six of the eight currently listed diseases: chancroid; gonorrhea; granuloma inguinale; lymphogranuloma venereum; syphilis, infectious stage; and infectious leprosy. If this proposal is approved, aliens suffering from any of these conditions will no longer be excluded.

Mr. Hoyer: Many members of the Congress are very concerned about this issue, and I would be interested in your views on the substantive public health issues involved, as well as your perspective on precisely how much further the Administration will move on this issue and how the Congress may be helpful.

Dr. Mason: Aliens with these diseases can no longer be considered a threat to the United States. The sexually transmitted diseases proposed for deletion are not transmitted by casual contact, through the air, or from common vehicles (such as fomites, food, or water), nor will an infected person in a common or public setting place another individual inadvertently or unwillingly at risk. Rather, these diseases are primarily spread through voluntary exposure. Because HIV infection was added to the list of dangerous contagious diseases as mandated by statute, we did not propose to delete it from the list in this NPRM.

Leprosy (Hansen's disease) is not highly contagious; the disease is spread through prolonged contact with an infected individual. The majority of imported cases occur in persons who do not manifest outward signs of the disease when they are medically screened abroad, but develop active disease after arriving in this country. Effective drugs are now available for treating this disease and suppressing its infectiousness. In recent years, management of patients with Hansen's disease has substantially changed from isolation from society to ambulatory treatment. There is a nationwide system in the United States to provide comprehensive care and treatment to persons diagnosed with Hansen's disease.

Tuberculosis would remain on the list. Unlike the other diseases on the list, tuberculosis can be transmitted through the air, and an infectious person can place others at risk through casual contact. Those found to have infectious tuberculosis should receive treatment until they are no longer infectious before they are allowed to travel to the United States. At that point, existing public health programs are capable of managing the relatively few who will require further treatment after arrival.

We propose to remove the diseases listed in the NPRM through the rulemaking process. We believe the Public Health Service should be responsible for determining which conditions should be on the list of dangerous contagious diseases. The enactment of section 518 of Public Law 100-71, the Supplemental Appropriations Act of 1987, was the first time a disease was added to the list of dangerous contagious diseases by statute since tuberculosis and leprosy were removed from the law in 1961. Again, we believe that aliens with HIV infection do not present a significant public health risk to residents of this country; however, we cannot remove HIV infection through the normal regulatory process.

AIDS EDUCATION AND PREVENTION EFFORTS

Mr. Hoyer: The Office of Technology Assessment, the GAO and the Presidential AIDS Commission all have said that we need scientific evaluation of the funds we are spending on AIDS education and prevention. Do you agree, and how much have we accomplished in this area?

Dr. Mason: The PHS agrees that scientific evaluation of HIV prevention and education activities is extremely important. For this reason, there are ongoing and planned initiatives in FY 1990 and 1991 to evaluate prevention/surveillance activities. The CDC continues to incorporate evaluation as an essential component of its HIV activities. In FY 1989, for example, program activities which constituted 94 percent of the HIV budget had evaluation activities in place or planned. The National Academy of Sciences, in its 1989 report, Evaluating AIDS Prevention Programs, recommended to CDC that approximately 10 percent of program funds should be used to evaluate HIV prevention activities. CDC estimates that it currently spends close to that amount on evaluation efforts, although it recognizes the need to expand its efforts to evaluate the efficiency and the effectiveness of existing as well as alternate approaches to HIV prevention. Overall, 10 percent is a minimal estimate of what adequate evaluation is expected to cost for any program component.

To date, there are considerable data to suggest that HIV prevention and education activities are having the desired effect:

- Results of 38 studies of HIV counseling and testing indicate that risk behaviors can be decreased through these intervention efforts. All six studies on intravenous drug users show decreases in risky injection practices while the 23 studies on homosexual men show decreases in high risk behaviors for both seropositive and seronegative men. Other studies show increased condom use among infected individuals who know their antibody status.

- Since 1985, approximately 2.5 million HIV tests have been performed in public sites through September 30, 1989, and 149,639 of those tests were positive. This represents an estimated 123,000-145,000 individuals found to be infected with HIV.

- Reports of decreases in syphilis and gonorrhea in gay men continue to reflect safer sexual behavior among this population.

- Preliminary data from 11 States indicate that an average of 90 percent of their schools provided some form of HIV education.

- Surveys indicate that public awareness is high and misunderstanding about transmission (a potential source of discrimination) has declined since the National Public Information Campaign was launched in 1987.

- Expanded demand for information continues. The National AIDS Hotline receives approximately 21,000 calls a week while the National AIDS Clearinghouse distributes over 1 million documents a week.

Mr. Hoyer: Isn't it enormously difficult to measure the impact of specific education and prevention measures against actual changes in behavior?

Dr. Mason: Assessing the effectiveness and impact of specific intervention programs is a formidable task. Scientific methods which are applied to conventional biomedical research cannot be used since ethically and technically it is difficult to establish adequate control groups (see below). There are five major challenges in evaluating HIV prevention activities funded by CDC:

1. Current programs designed to prevent the spread of HIV are varied in scope, cover a broad range of different interventions, and address diverse populations.
2. Most program efforts funded by CDC are designed to protect the nation's health during a crisis. They tend to be service rather then research oriented and attempt to provide effective prevention messages to the largest number of persons at the lowest possible cost.
3. HIV prevention programs are mutually reinforcing and do not occur in isolation. They are essential components of an overall national strategy to prevent the spread of HIV.
4. These programs have been operational for a relatively short time. Observation of changes in complex behaviors requires a significant commitment of resources which, until recently, have been devoted primarily to making the HIV prevention programs operational. The National Academy of Sciences, in its report, "Evaluating AIDS Prevention Program," indicated that the evaluation of AIDS intervention programs is not an easy task: it will take time and it will also require a long-term commitment of effort and resources. We are making that commitment.
5. There are also ethical constraints associated with conducting randomized field experiments with control groups that do not receive education or intervention.

In spite of these challenges, CDC has made significant strides towards developing effective evaluations of HIV prevention activities. For example, quasi-experimental community trials will enable CDC to measure the efficacy of school-based HIV prevention programs in reducing the percent of students who engage in behaviors that place them at risk for HIV infection. As indicated by the National Academy of Sciences, the nature of the HIV/AIDS epidemic demands an unwavering commitment to prevention programs, and ongoing prevention programs require a similar commitment to their evaluation.

Mr. Hoyer: What will be the impact of the recently established Task Force on Women, Adolescents and Children with HIV?

Dr. Mason: The Task Force is charged with providing continued counsel regarding the implementation of the Secretary's Work Group on Pediatric HIV Infection and Disease recommendations. The Task Force will also continue to monitor progress in this area and provide suggestions and guidance on responses. The Task Force is co-chaired by Dr. James R. Allen, Director of the National AIDS Program Office and Dr. Antonia C. Novello, the Surgeon General.

ALCOHOL DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION

Mr. Hoyer: As you know, the Congress has expressed its concern that ADAMHA's service components not be reduced or eliminated, and the justification indicates that a review of whether it is appropriate to have the research and service components combined is underway.

Is there any initial or interim report you can give us, and what will ultimately happen to this report?

Dr. Mason: The linkage of research and services that exist within ADAMHA make it a unique component of the Public Health Service. Whether or not this linkage is the most appropriate manner to combat addictive and mental disorders and other health problems is the subject of an Institute of Medicine study commissioned by DHHS. The contract for this 16-month study has recently been awarded by HHS. The IOM has already nired staff and is in the process of assembling an 18-member distinguished committee that will examine this issue. No interim report will be issued; we expect the final report in June 1991. What ultimately happens with regard to implementation of any of this report will be the result of careful and deliberate study of the recommendations it contains.

FAMILY PLANNING

Mr. Hoyer: How many cases are pending on the 1988 regulations limiting the counseling and referral services relating to abortion referrals in Title X clinics?

Dr. Mason: In 1988, three separate lawsuits were filed in the District Courts in Denver, Boston, and New York challenging the regulations on statutory and constitutional grounds. The Department was enjoined from enforcing the regulations by the District Courts in Denver and Boston; the New York court upheld the regulation.

All three cases were appealed. On May 8, 1989, the United States Court of Appeals for the First Circuit (Boston) affirmed the lower court decision striking down the regulations.

The Department requested and was granted an en banc rehearing of the First Circuit decision. On March 19, 1990, the First Circuit Court of Appeals, sitting en banc, upheld the Boston District Court decision.

On November 1, 1989, the United States Court of Appeals for the Second Circuit affirmed the decision of the New York District Court upholding the regulations. Plaintiffs have obtained a stay of that decision pending appeal to the Supreme Court.

The U. S. Court of Appeals for the Tenth Circuit has not yet ruled on the decision of the Denver District Court, and the permanent injunction entered by that court remains in effect. Thus, at this time there are two circuit court rulings, one upholding the Department's position and another striking it down.

In 1989 a fourth lawsuit was filed by several Title X subgrantees in West Virginia seeking to enjoin implementation of the regulations in that state. A decision was rendered on March 1 partly upholding and partly invalidating the regulations. We are currently considering whether to appeal this ruling.

Mr. Hoyer: To what degree are family planning clinics appropriate points of access for women and in some instances children who are at risk for STDs and other health care problems?

Dr. Mason: All Title X clinice provide STD counseling and education services. STDs can affect fertility, and knowledge of STD status is important in the selection of a contraceptive method. One third of all Title X clients are adolescents, and 2/3 are younger than 25. Since unstable and serial sexual relationships are more common among younger persons and these behaviors increase the risk of STDs, consideration of STD infection is an important part of reproductive health care for persons in this age group.

Mr. Hoyer: If adequately funded couldn't they provide a similar 'point of entry' for women who are not likely to seek other forms of health care?

Dr. Mason: Family planning clinics have traditionally served as points of access to the health care system for many low-income women of reproductive age. Service data show that Title X clinics are serving a higher proportion of the total population in need of subsidized family planning services now than in 1981.

AGENCY FOR HEALTH CARE POLICY

Mr. Hoyer: Is there any plan to conduct research on the outcomes for patients when pain is a significant component of an illness -- is it the case that health care providers are not always as helpful to patients in alleviating pain because medication is potentially addictive?

Dr. Mason: Fear of addiction, leading to underprescription of pain medication by physicians and underuse of prescribed medication by patients, is a common and well-documented problem. Study is required to examine pain management strategies and outcomes and to assess the risk (both perceived and real) of and the potential for harm of addiction.

The Agency for Health Care Policy and Research (AHCPR) is currently funding a study to determine if pain management methods employed by primary care physicians are associated with different risks of dysfunctional chronic pain (DCP) among patients with back pain and headache. The study population is 60 primary care physicians, 1,200 back pain and 1,200 headache patients. The investigators are examining physician variation in the use of high risk and low risk pain management methods and testing whether patients exposed to high risk pain management methods have increased risks of DCP. After adjusting for case mix, investigators will test whether physicians who employ high risk pain management methods have higher DCP risks among their patients than primary care physicians who use low risk methods.

In addition, the AHCPR-sponsored Patient Outcome Research Teams (PORTs) are conducting research in areas where pain is a significant component of illness: surgery for low back pain and total knee replacement. Most patients have these procedures for relief of pain; a reluctance by physicians to prescribe adequate pain medication may lead to the performance of unnecessary procedures while failure to perform them when needed may lead to drug addiction. Ongoing studies should lead to guidelines for the optimal use of medication and surgery.

Other important issues to be considered include the tradeoff between alertness and pain relief and the role of pain relief in improving function, quality of life, and tolerance of therapy. These questions are all very prominent in the treatment of cancer.

Mr. Hoyer: One of the networks recently did a news segment about chemotherapy and breast cancer indicating that physicians may reducing dosages of chemical therapies in order to alleviate the toxic side effects, and I wondered whether there has been any research in this area?

Dr. Mason: The Agency for Health Care Policy and Research (AHCPR) has recently been involved in a number of collaborative research efforts with the Public Health Service and university-based investigators on issues relating to beat cancer.

As part of its peer review and technical assistance efforts, AHCPR has provided secondary review and critique to two cancer studies in the past six months. The National Center for Nursing Research, NIH, has just funded The Johns Hopkins University Oncology Center to study whether variation in patient length of stay (LOS) and costs in a Comprehensive Cancer Center is explained by severity of illness at admission or severity of illness due to toxicity from chemotherapy treatment.

In the second study, recently funded by the National Cancer Institute, researchers at the University of Pittsburgh will investigate the reasons behind low recruitment rates for cancer clinical trials. The study also will examine whether recruitment bias exists and examine specific reasons for referral and non-referral of patients into ongoing randomized clinical trials of treatments for breast cancer.

Two recent Institute of Medicine (IOM) reports have identified breast cancer as a significant problem for effectiveness research. The AHCPR will be supporting research to identify and assess variation in treatment patterns and outcomes for patients with breast cancer and to highlight optimum management strategies.

ADMINISTRATION OF TITLE X

Mr. Pursell: The Administration's request for the Office of the Assistant Secretary for Health (OASH) for FY 91 is $206 million. A large portion of this, $139 million, is requested for a proposed State-administered family planning program. How would this program be administered under Title X?

Dr. Mason: Under the Administration's proposal, all Title X funds would be awarded to States (and territories) for the provision of family planning services. States would be required to use these funds for family planning, give priority to service persons from low-income households, provide services on a voluntary and confidential basis and encourage family involvement, and comply with the prohibition on use of funds in programs where abortion is a method of family planning. Within these standards, States would be free to reflect local standards and values in their family planning program, such as, for example a parental notification or consent provision such as that passed by the Utah legislature. In addition, States would be free to organize their family planning programs in such a way as to best complement other State primary health care activities.

Mr. Pursell: How would this program improve access to maternal and child health care?

Dr. Mason: At the present time, about half of the Nation's Title X grantees are state or territorial governments. In most of these jurisdictions, States use Title X funds in conjunction with Maternal and Child Health block grant funds, as well as other Federal funds and funds provided by the State to support a network of primary care clinics which provide continuity of care for women seeking to avoid pregnancy, women seeking pre-conceptual counseling, pregnant and parenting women, their infants, and women who, having borne a baby, want to adopt an effective method of family planning.

In the other half of the Title X program at the present time, providers are private non-profit agencies such as family planning councils or Planned Parenthood affiliates which, most typically, provide services in isolation from maternal and child health clinics or other providers of primary health care. While some of these "free standing' family planning grantees provide, or are co-located with providers of, maternal and child health care, this is the exception. Most emphasize only family planning services to the exclusion of other primary health care services although some do provide abortion.

Under the Administration's proposal, all funds would be provided to the States. If a State wished to contract with a family planning-only agency to provide Title X services, that would be its right. We believe that many States would view this as an opportunity to achieve the economies of scale and increased efficiency which combining the Title X services within a comprehensive primary health care program would permit.

Mr. Pursell: Could you please discuss for the Subcommittee any additional effo~~rts your~~ office has under consideration to address the need for improved access to maternal and child health care?

Dr. Mason: The primary initiative of the maternal and child health program for fiscal year 1991 in the area of improved access is the request for an additional $25 million for "one-stop shopping." This special discretionary grant initiative, which would build upon current demonstration projects now underway in various States across the country, would support State and local community efforts to improve access to prenatal and infant care and related services.

The intent of the projects, which would have to be located in areas identified for their above average rates of infant mortality, would be to restructure, reorganize and greatly streamline the existing array of health and social services which communities offer to pregnant women and infants.

DISEASE PREVENTION AND HEALTH PROMOTION

Mr. Pursell: I see that the Administration is requesting $4.5 million for the Office of Disease Prevention and Health Promotion. Do you believe we--the Administration and Congress--are doing enough to promote disease prevention? Is the public receiving the information it needs?

Dr. Mason: The challenge is always to improve and make more efficient our activities in helping Americans to prevent disease. I believe that more important than increasing programs and activities to this end is our effort to focus existing resources, programs, and activities to gain greater effects. This is the whole purpose behind the initiative that we are now leading to establish a decade-long strategy using measurable objectives to be achieved by the year 2000.

The year 2000 national health promotion and disease prevention objectives attempt to define realistically and with some degree of precision our opportunities to prevent premature death, disease, and disability in the coming years. There may be, in some few cases, room for new programs or new activities, as new challenges arise. But the most pressing need is to use more effectively what we have already in place, through block grant programs to the States, through the myriad information clearinghouses and public education programs on chronic diseases, injury prevention, and particular health risks (e.g., smoking, alcohol, and drugs), and through support for preventive services.

Mr. Pursell: What measures need to be taken to improve access to preventive care and to improve the delivery of preventive care?

Dr. Mason: Clinical preventive services--screening tests, immunizations, and patient counseling--all have the potential to improve health and to postpone many deaths. Now that age-specific guidelines for effective preventive services are available, we need to work with the public nd providers to ensure that these effective interventions reach all of the American people.

The following measures will improve access to and the delivery of preventive care:

- o Better education for primary care providers (both those in training and those in practice) on the appropriate use of preventive services. Professional groups should ensure that they are providing optimal education for their members in these areas.
- o Improved knowledge by the public about the need for preventive services. Public education campaigns, like those sponsored by various Public health Service agencies and by

national voluntary organizations, need to be coordinated, so that their messages are most effective.

- Increased interest in preventive services among employers. Healthy workers are productive workers, and employers should insist that effective preventive services be included in the health care policies they offer to all of their workers.
- Better coverage of effective preventive services in both publicly and privately sponsored health insurance plans.
- More and better quality health services research on what preventive services are effective in improving health and postponing death, as well as on new office systems to ensure that patients receive needed preventive services.

COST-BENEFIT ASPECTS OF NIH

Mr. Pursell: We are spending nearly $8 billion at NIH this year, and I support that. There are many Institutes in need of even greater funding. Do you think we are getting the most for our research dollar, when it comes time to implement NIH findings?

Dr. Mason: The National Institutes of Health continuously examines various cost-benefits aspects of NIH-sponsored research. One part of such an effort has focused on identifying the cost implications of the investment of NIH applied research and clinical trial funds used to confirm the appropriateness of new health care advances or changes in health care delivery. Twenty-six examples have been identified and studied over the last several years.

The examples involve several different health care areas. These include diagnosis/screening, new therapies, prevention, and evaluation of existing practices. In a few instances, combined areas are involved. In several cases, the impact of the health care advance concentrates mostly on children or youth, while a number involve primarily adults. All age groups are involved in a few instances. Overall, results from this analysis indicate that investments in biomedical research result in significant health benefits to a broad base of the U.S. population. At the same time, however, it is clear that additional efforts are needed in some areas to ensure future progress in the transfer of emerging as well as already developed technologies. For example, we are embarking on an era during which basic information about the genetic modification of cellular function as well as information about the human genome will become available from NIH-sponsored research. Continued emphasis on translating this information into potential therapies for a wide range of diseases is imperative. At the same time, it is also important that NIH continue to transfer information obtained from sound biomedical research to recommendations concerning life-style changes that can enhance disease prevention.

Table 1 provides a useful summary and overview of the results of the analysis. In order to summarize the results over a number of years, all calculations have been converted to 1989 prices. The total NIH investment in applied research and clinical trials across all the examples and years amounts to approximately $800 million in 1989 prices. The comparable realizable one-year savings (again expressed in 1989 prices) range from a low of about $5.2 billion to a high of nearly $6.7 billion, depending on the conservatism of the set of assumptions chosen. The lower figure suggests an annual rate of potential return of $6.50 for a dollar invested; the higher figure carries an even more impressive $8.80 for the same dollar.

Some specific examples are summarized below. In these cases, the investment and savings figures are expressed in the prices of the year in which the example was developed.

- Saving close to 900 newborns annually from a lifetime of arrested physical and mental development through development of a mass screening device for neonatal hypothyroidism. The total NIH costs for targeted applied research and clinical trials has been estimated at about $1.2 million with a potential one-year savings of over $206 million.

- Development of laser-based photocoagulation treatment for early stage diabetic retinopathy. This can arrest what would become a chronic and crippling disease at a later stage and has resulted in potential one-year savings of over $2 billion. The total NIH investment for a clinical trial was $48.2 million.

- During the last decade NIH-supported research has identified the metabolic abnormalities which underlie the formation of kidney stones. This, in turn, has led to the development of relatively simple and inexpensive potassium citrate treatment for the prevention of the recurrence of kidney stones among the estimated 198,000 patients susceptible to such a condition. Slightly over $679,000 was expended for research grants to pay for the research effort. It is estimated that close to $300 million in annual treatment costs and lost work days can be saved from this advance.

- Validation of the advantages of outpatient breast biopsies has made possible a two-stage breast cancer procedure that provides an alternative for more than 490,000 women annually who would otherwise suffer the anguish and uncertainty of combined diagnosis and treatment under general anesthesia. A total of $10.6 million of the NCI National Surgical Adjuvant Breast Project was expended from 1971 to 1986 to perfect this procedure. Potential one-year reduced diagnosis and treatment costs are estimated at upwards of $169 million.

- Development of cisplatin in combination therapy for treatment of advanced state testicular cancer has provided new hope for victims of this disease. Testicular cancer is the most common malignancy in 15-35 year old males and is the most frequent cause of cancer-related deaths in this age group. The new treatment not only significantly increases the survival rate but reduces work days lost by premature mortality and morbidity. This translates into a potential one-year saving for the nation of upwards of $109 million. NIH funds invested in the discovery and development of cisplatin over a 17 year period amounted to less than $56 million.

- An improved vaccine for the prevention of Hemophilus influenza type b (Hib) disease in the 18 month to 5 year age group has been developed with NIH funds. Hib is a leading cause of bacterial meningitis in the United States. Prevention of meningitis also protects a number of surviving children from a variety of neurological sequelae, including hearing loss, vision impairment, mental retardation and seizure disorders. The estimated net cost savings realizable from the reduction in premature mortality and elimination of long-term earning losses are close to $146 million annually. Total NIH research support during a 17 year period was $15.6 million.

- An assay for detection of HIV antibodies in the sera of individuals exposed to the HIV virus which can save 891 transfusion recipients from HIV infection annually has been developed with NIH funds. This translates into a potential one-year savings of slightly over $63.7 million. Total NIH expenditures for the development and evaluation of the blood tests from 1984-1989 was $6.7 million.

- Development of adjuvant therapy with levamisole and 5-fluorouracial (5-FU) for Dukes' C Colon Cancer. This new treatment significantly delays tumor recurrence and reduces patient risk of dying of recurrent colon cancer by one-third. Over 22,000 patients are diagnosed with this condition annually. Potential cost savings resulting from reduction of premature mortality and lost work days add up to close to $136 million annually. Total NIH investment since 1978 has amounted to $10.8 million.

- Development of a combined cytotoxic drug and steroid treatment for patients suffering nephritis resulting from systemic lupus erythematosus has been found to support life-supporting renal functions beyond five years at a considerably greater rate than earlier interventions. This provides hope for the more than 1,000 nephritis victims who each year are afflicted with this disorder. The realizable annual cost savings associated with this advance are estimated at close to $70 million. The NIH support totaled $9.8 million since 1970.

The remaining examples involve advances in diagnosis, improved therapy, vaccine or chemotherapeutic agent, and confirmation of ineffectual or inappropriate current practice. Realizable annual cost savings for these examples range from 2.6 to 258 million dollars.

TABLE 1

POTENTIAL ANNUAL HEALTH CARE COST SAVINGS RESULTING FROM NIH INVESTMENTS IN APPLIED RESEARCH AND CLINICAL TRIALS, BY YEAR OF EXAMPLE AND ICD
(MILLIONS OF 1989 DOLLARS)

YEAR	ICD	TOTAL SUPPORT(1)	LOW REALIZ. SAVINGS(2)	HIGH REALIZ. SAVINGS(2)
1986	NHLBI	32.8	296.6	593.1
1986	NHLBI	6.7	12.2	107.0
1986	NHLBI	0.5	2.1	3.0
1986	CC	0.4	15.4	30.7
1986	CC	0.0	1.1	2.3
1986	NIAID	28.5	54.4	108.9
1986	NIAID	2.2	6.2	6.2
1986	NIAID	4.0	20.8	41.6
1986	NINCDS	10.9	15.9	15.9
1986	NCI	12.9	194.1	388.4
1986	NEI	58.5	2,643.7	2,643.7
1986	NICHD	1.5	237.0	237.0
1986	NIDDK	0.8	344.6	689.3
		159.6	3,844.0	4,867.0

YEAR	ICD	TOTAL SUPPORT(1)	LOW REALIZ. SAVINGS(2)	HIGH REALIZ. SAVINGS(2)
1988	NINDS	2.2	54.8	73.1
1988	NICHD	8.9	227.7	303.7
1988	NIAID	9.2	57.6	76.8
1988	NIAID	17.3	119.4	159.2
1988	NHLBI	0.3	11.6	15.5
1988	NCI	61.6	119.7	159.6
1988	NCI	19.1	96.0	128.0
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		118.6	686.8	915.7

POTENTIAL ANNUAL HEALTH CARE COST SAVINGS RESULTING FROM NIH INVESTMENTS IN APPLIED RESEARCH AND CLINICAL TRIALS, BY YEAR OF EXAMPLE AND ICD (MILLIONS OF 1989 DOLLARS)

YEAR	ICD	TOTAL SUPPORT(1)	LOW REALIZ. SAVINGS(2)	HIGH REALIZ. SAVINGS(2)
1989	NIDDK	492.3	357.3	476.3
1989	NIAMS	10.3	73.1	97.5
1989	NCI	11.4	142.4	189.9
1989	NCI	7.0	50.1	66.7
1989	CC	0.4	28.3	37.7
1989	CC	0.4	32.0	42.7
		------	------	------
		521.8	683.2	910.9

TOTAL ALL YEARS 800.0 5,214.0 6,693.7

(1) 1989 VALUES CALCULATED USING BRDPI INDEX VALUES, 1989=100
(2) 1989 VALUES CALCULATED USING CPI INDEX VALUES, 1989=100

PRESIDENT'S COUNCIL ON PHYSICAL FITNESS AND SPORTS

Mr. Pursell: The budget request includes $1.5 million for the President's Council on Physical Fitness and Sports. It also indicates that emphasis will be placed on fitness for older adults and minorities. Do you agree that the best place to begin a fitness campaign is during the childhood years? Is it more difficult to encourage, promote and address fitness when the problem has its roots in the childhood years?

Dr. Mason: We agree that more attention to fitness in kindergarten and elementary grades is needed because that is the time when many health and fitness behaviors are developing. There is evidence that participation in physical education can contribute to student performance on academic measures; that it can influence desirable shifts in student activity levels; and that it can significantly influence how children feel about physical activity and health-fitness which in turn can influence their quality of life. In addition, participation in physical education can improve knowledge relative to healthy lifestyles which can improve several important outcome areas, including blood cholesterol, HDL-C, risk factor reduction, and diastolic blood pressure.

Mr. Pursell: Do you believe our schools need to place more emphasis on their fitness programs?

Dr. Mason: The President's Council on Physical Fitness and Sports, along with many others in this country, has been advocating that we need to have physical education a minimum of 30 minutes a day, five times a week. Only one state, Illinois, meets the minimum requirements for physical education and they are less than the minimum stated above. We need to reach out to our young people through the school system where they reside for 9 months out of the year and give them a good opportunity to be fit through effective physical fitness programs. We need to reinstate a physical education mandate in all of our states.

National and state policies regarding school physical education/fitness programs should be examined to ensure better scope and sequence in teaching physical education by qualified teachers.

NATIONAL PRACTITIONER DATA BANK

Mr. Porter: What is the status of the regulations to implement the National Practitioner Data Bank?

Dr. Mason: The National Practitioner Data Bank final regulations, to implement the Data Bank, were published in the Federal Register on October 17, 1989.

Mr. Porter: When will the Data Bank begin operation?

Dr. Mason: The Secretary has announced that the Data Bank will be operational in the second half of FY 1990. We believe that the Data Bank will open in the Summer of 1990.

Mr. Porter: What user fees will be charged and in what amounts?

Dr. Mason: The User Fee policy is under development by the Department at present and is expected to be in the range of $2 for all queries except that practitioners who request information about themselves will not pay a fee.

Mr. Porter: How much revenue do you expect these fees to generate in FY 1990 and FY 1991?

Dr. Mason: No appreciable income will be generated in FY 1990. In FY 1991, the Department expects to generate $1.5 to $2 million through Data Bank user fees.

Mr. Porter: Confidentiality of information is central to the success of the National Practitioner Data Bank. Does the Department oppose any change in the authorizing statute which would allow outside access to the information contained therein? If not, why not?

Dr. Mason: The original intent of the legislation, Title IV of the Public Law 99-660, the Health Care Quality Improvement Act of 1986, was to preserve the confidentiality of the information contained in the Data Bank. The Department has proceeded to implement the statute and to develop the Data Bank with confidentiality of information of paramount importance to its operation. Any change in the confidentiality policy would constitute a major departure to the Data Bank's operation and one that would require considerable alteration to the contract scope of work and considerable cost to the Federal Government.

CHRONIC FATIGUE SYNDROME

Mr. Porter: Chronic Fatigue Syndrome (CFS) is the subject of ongoing research and epidemiological efforts at the National Institutes of Health and the Centers for Disease Control. What efforts have you undertaken to coordinate and expand PHS involvement in assessing the spread of CFS, developing treatments, searching for a cure, and disseminating information on the syndrome?

Dr. Mason: In FY 1989, CDC implemented a surveillance system in four areas of the United States (Atlanta, Georgia; Kent County (Grand Rapids), Michigan; Sedawick County (Wichita), Kansas; and the Reno-Carson City metropolitan area, Nevada). This surveillance system is designed to:

- identify persons in these areas who have chronic, unexplained fatigue,
- carefully evaluate each for evidence of preexisting chronic conditions that could be causing their symptoms,
- determine if each fulfills the published Chronic Fatigue Syndrome (CFS) case definition,
- monitor the annual incidence and the prevalence of CFS in the four areas,
- identify patterns of symptoms and their timing relative to CFS onset and recovery, and
- examine methods by which physicians evaluate these patients relative to the published case definition of CFS. Approximately 200 physicians have been recruited to participate in this surveillance system.

The CDC has:

- completed interviews and medical record reviews of 20 CFS patients in Atlanta for whom the diagnosis of CFS could be assessed,
- provided laboratory support for a study of patients diagnosed with CFS in Massachusetts to assess a reported association of CFS with chronic enteroviral infections (no association was identified), and
- developed a CFS fact sheet for responding to public inquiries (about 5,000 inquiries were received during FY 1989).

The initial review of a sample of CFS cases in Atlanta underscores the importance of CDC's focus on case definitions in correcting a major flaw in CFS research and to improve future communications. The review has led to the decision to try to formally link a study of cases and controls to the surveillance and followup system in Atlanta where each case-patient's status can be evaluated.. by a panel of expert physicians. It also underscores the importance of publicizing the appropriate laboratory tests for suspected cases of CFS.

CFS cannot be diagnosed by Epstein-Barr virus (EBV) serologic tests, and it remains a diagnosis of exclusion. This message should reduce morbidity from potentially treatable conditions which are currently being misdiagnosed as CFS or Chronic Epstein-Barr virus (CEBV).

For appropriate management, CDC emphasizes symptomatic treatment, healthy life style, appropriate reassurance, avoidance of potentially dangerous therapies that lack scientific justification and periodic reevaluations of the diagnosis.

INCREASED RESOURCES FOR FAMILY PLANNING

Mr. Porter: Given the Administration's opposition to legal abortion, will you support increased attention and resources for family planning -- the best preventor of unintended pregnancies? If not, why not?

Dr. Mason: The Administration certainly supports the availability of family planning. In addition to the appropriation of the Title X program, the Medicaid program supports approximately $200 million in family planning services per year. Even excluding other sources of Federal family planning support -- such as that from the Social Services Block grant, the Maternal and Child Health Block Grant, the Community Health Center program and the Indian Health Service -- the combination of Title X and Medicaid shows a steady increase in funding for family planning services since 1982.

During this same period, according to the Alan Guttmacher Institute, the population in need of subsidized family planning services -- women below the age of 44 at or below 150% of the low income standard and all teenage girls -- has decreased by 16%, largely due to a decrease in the numbers of women in this age group and increased use of sterilization by older members of this group.

Bureau Common Reporting Requirements (BCRR) data show that Title X programs are serving a higher proportion of the total in need population at this time than in 1981.

Mr. Porter: The largest and fastest growing group of HIV infants are those who acquired it prenatally. Given this fact, shouldn't sexually active adolescents and women of childbearing years have access to family planning services? Would you support additional Title X funding targeted for outreach to HIV-positive women and other women and adolescents at risk for HIV infection, for counselling and testing programs, and to provide contraceptive services to these high risk women?

Dr. Mason: There are indeed high priority services to help prevent increases in perinatally transmitted HIV infection in infants. The Title X program administration has made it clear to Title X grantees that HIV services are a priority, that they should be provided as an integral part of the family planning and reproductive health mission of Title X programs. Title X programs have been encouraged to develop arrangements with State HIV programs which receive most HIV funds to provide these and other appropriate HIV related services in Title X settings. Although increasing the Title X appropriations to provide HIV services in Title X settings has been discussed, we have decided that it is better to continue to provide the HIV funds through the State AIDS program and to encourage cooperation between Title X and other HIV program activities at the State and substate levels.

Mr. Porter: What is the cost per-client of Title X family planning services?

Dr. Mason: Grantees use different approaches when reporting the cost of providing services to their clients. For example, some include payments from third-party payers and/or grant generated income over and above the match required, while others do not. We estimate that the average cost per client served in a family planning clinic which receives funds from other sources as well as Title X is approximately $100.

Mr. Porter: What is the average health care cost associated with treating an HIV-positive infant who acquires the infection prenatally?

Dr. Mason: Average costs of caring for HIV infected children generally are higher than for adults. Pediatric HIV disease has a shorter incubation period, a higher opportunistic infection rate, and the cumulative mortality rate is higher. A comprehensive study done by Hegarty, et al, "The Medical Care Costs of Human Immunodeficiency Virus - Infected Children in Harlem", published in the Journal of the American Medical Association, October 7, 1988 - Vol. 260, No. 13, provides a comprehensive review of costs. The authors found that the average lifetime costs were $90,347 per child, with one-third of the inpatient days and over 20% of the costs resulting from social rather than medical factors.

COLLECTION AND ANALYSIS OF TITLE X DATA

Mr. Porter: In 1983, the Department submitted a plan to Congress for the collection and analysis of data on Title X. This plan has never been acted on. Does the Department ever intend to conduct this analysis? Please provide an estimate of the resources required to carry out this function in FY 91.

Dr. Mason: Within fixed budget limitations, increasing funding for data collection is necessarily balanced by reductions in funds available for services. In an effort to maximize funding for family planning services, we examined the 1983 data plan and determined that sufficient data could be developed through other, less expensive means than those contemplated by the 1983 plan. The 1983 data plan contemplated collecting data in 4 areas; women in need of family planning services, clients served by organized family planning services, family planning clients served by private physicians, and clients served by organized family planning services.

Women in need of family planning services is important for fund allocation purposes and for assessment of the overall extent to which family planning programs are serving the need population. For these purposes, data need not be available on an annual basis, but only occasionally. The Alan Guttmacher Institute has continued to develop these data periodically, although not with Federal funding. Their most recent set of these data was published in 1988. Since development of these data requires use of factors derived from the National Survey of Family Growth, which is collected only about every 5 years, trying to develop annual need estimates would be an expensive exercise which would be not very useful as it would in most years rely on data factors which would be 3, 4, 5 or more years out of date.

Data on Clients served by organized family planning services is collected by the National Survey of Family Growth. In addition, data on clients served by Title X programs, including age and low income status, is collected by the Bureau Common Reporting Requirements (BCRR).

Family planning clients served by private physicians, when combined with data on Clients served by organized family planning services, enables an estimate of the number and characteristics of clients served by each part of the family planning service continuum, as well as the number served overall. The National Survey of Family Growth (NSFG) is the best and most efficient mechanism for developing data both on private physician services and services provided by clinics. The 1988 cycle of the NSFG was redesigned and augmented to improve the quality of data on clinic clients, as well as to allow some analysis specifically of clients served in Title X clinics. The Title X program is a major supporter of the National Survey of Family Growth.

As the 1983 data plan makes clear, development of information on Funding Patterns for Family Planning Services is a difficult task which can yield, at best, approximate estimates. Data on funding patterns for Title X programs are collected through the Bureau Common Reporting System (BCRR). Furthermore, useful estimates of funding sources and patterns for family planning programs are developed periodically by the Alan Guttmacher Institute and are published in Family Planning Perspectives (FPP). The most recent summary of these data appeared in FPP, September/October 1988.

We estimate that costs to the Title X program for FY 1991 will include direct billings of $300,000 to support reinterviews, analysis and preparation for the next cycle of the NSFG, and $1,000,000 in project costs to prepare and submit data under the BCRR.

CONTRACEPTIVE DEVELOPMENT

Mr. Porter: Contraceptive development in the United States has dropped dramatically. Would the Department support implementation of the recommendations of the National Academy of Sciences to address this problem? Would you work with the Congress to support additional funding for contraceptive research? If not, why not?

Dr. Mason: The contraceptive development issue is an extremely complex one. Contraceptives product liability is a major concern. Unlike most drugs, which are intended to cure or ameliorate a disease or condition, contraceptives are used primarily by healthy persons. Contraceptives are typically used over a long period of time. These facts, combined with the seriousness of potential problems, --- teratogenicity, carcinogenicity, sterility or long-term hormonal changes, -- create the potential for massive legal judgments. It is not surprising that drug companies are hesitant about major investments in this field, particularly in light of the case involving the Dalkon Shield intrauterine device. However, while new contraceptive development activities have not been heavily supported by U.S. industry, gradual improvements to the oral contraceptive have been achieved in the U.S. in recent years. The oral contraceptive is a very effective contraceptive method, and it has been improved substantially over the past 30 years. The National Academy of Sciences report bears careful analysis. However, I think we should be extremely hesitant to suggest changing product liability laws or providing drug companies immunity from lawsuits. Our role in fostering contraceptive development must be balanced by our role in ensuring protection for the American consumer.

STATUS OF TITLE X LITIGATION

Mr. Porter: Title X regulations to alter prior practice with respect to counselling and referral are currently the subject of litigation in three U.S. Circuits. Please provide for the record a comprehensive update on the status of this litigation.

Dr. Mason. In 1988, three separate lawsuits were filed in the District Courts in Denver, Boston, and New York challenging the regulations on statutory and constitutional grounds. The Department was enjoined from enforcing the regulations by the District Courts in Denver and Boston; the New York court upheld the regulation.

All three cases were appealed. On May 8, 1989, the United States Court of Appeals for the First Circuit (Boston) affirmed the lower court decision striking down the regulations.

The Department requested and was granted an en banc rehearing of the First Circuit decision. On March 19,1990, the First Circuit Court of Appeals, sitting en banc, upheld the Boston District Court decision.

On November 1, 1989, the United States Court of Appeals for the Second Circuit affirmed the decision of the New York District Court upholding the regulations. Plaintiffs have obtained a stay of that decision pending appeal to the Supreme Court.

The U. S. Court of Appeals for the Tenth Circuit has not yet ruled on the decision of the Denver District Court, and the permanent injunction entered by that court remains in effect. Thus, at this time there are two circuit court rulings, one upholding the Department's position and another striking it down.

In 1989 a lawsuit was filed by several Title X subgrantees in West Virginia seeking to enjoin implementation of the regulations in that state. A decision was rendered on March 1 partly upholding and partly invalidating the regulations. We are currently considering whether to appeal this ruling.

The Department has implemented the regulations as grants have come up for renewal except where enjoined from enforcing the regulations. To date, the regulations are being implemented in Kentucky, Texas, South Dakota, Iowa, part of Nevada and all of the territories.

Mr. Porter: Please provide an estimate of the costs to the taxpayer -- salaries and expenses -- associated with litigating these cases. Please include costs attributable to both HHS and the Department of Justice.

Dr. Mason: The Administration did not initiate litigation in any of the cases relating to the Title X regulations on prohibition of abortion activities in Title X projects. In each of the four cases which were filed, the Administration is the defendant. Since we expect that the ultimate outcome of these cases will be support for the Government's position and the regulations, we expect that litigation costs will be borne primarily by the unsuccessful plaintiffs, resulting in minimal overall costs to the Government.

Mr. Porter: These regulations are highly controversial. Would the Administration be willing to work with the Congress to devise an approach to this issue in an effort to gain wider support and acceptance?

Dr. Mason: Although these regulations have aroused some controversy, they were initiated in response to the continuing controversy about entanglement with abortion which has dogged the Title X program for decades. It is our belief that judicial vindication of these regulations will end controversy by establishing clear standards to ensure that family planning projects do not promote or encourage abortions. We would be happy to work with Congress to develop additional means to ensure that the family planning program serves as an effective program to reduce the rate of abortion, and to prevent abortion from being encouraged or facilitated in Title X clinics.

OFFICE OF HEALTH TECHNOLOGY ASSESSMENT

Mr. Porter: Last year, you indicated that you expected to complete a review of the Office of Health Technology Assessment's activities and procedures by summer, 1989. Would you please report on the results of that review?

Dr. Mason: The Office of Health Technology Assessment is reviewing its procedures and guidelines for evaluating the safety and effectiveness of medical technologies. This review is taking place in the context of both the provisions in the Omnibus Budget Reconciliation Act of 1989, Public Law 100-239, which established the Agency for Health Care Policy and Research, and the Notice of Proposed Rule Making (NPRM) issued by HCFA on the process of making coverage decisions. These two activities have caused us to examine carefully the approach used by the Public Health Service to develop recommendations on coverage based on the most current scientific information available. We expect to publish a description of OHTA actions and the PHS process for formulating recommendations by summer, 1990.

Mr. Porter: Provide for the record a summary of PHS AIDS-education efforts aimed at urban adolescent populations.

Dr. Mason: CDC's program of School Health Education to Prevent the Spread of HIV Infection is designed to increase the number of schools and agencies serving youth that provide HIV education programs and that integrate HIV education into comprehensive health education programs. The long asymptomatic period of HIV infection and the trend of migration to urban centers makes school health education important for every child in America.

Young persons who are not in school, especially those living in major urban areas, often are poorly reached by school-based programs and are at higher risk of HIV infection than their counterparts who remain in school. A disproportionate percentage of these youths are racial or ethnic minorities. In response, CDC is helping States and cities develop HIV prevention education programs in all areas of the country, that are targeted at both out-of-school youth and in-school youth, with emphasis on prevention efforts which are directed towards urban areas with a high incidence of HIV infection and AIDS. Programs for both are able to benefit from the six major elements that work together to develop HIV prevention programs. These elements are:

1) provide funds to national health and education organizations to develop training and curricula for their constituents;

2) provide funds and technical assistance to 55 State and territorial departments of education and to 16 local departments of education located in cities with a high incidence of AIDS;

3) assist in training program managers and other decision-makers, including parents, to develop and implement HIV prevention education programs;

4) help develop and disseminate HIV prevention materials and curricula, and help train teachers to use the materials;

5) enable funded State and local departments of education to determine students' knowledge, beliefs, and behaviors related to HIV; and

6) assist States and cities in evaluating their programs and interventions.

In addition, CDC provides funds to community-based organizations (CBOs) directly and indirectly, through cooperative agreements with State and select city health departments. Many of these CBOs direct their HIV prevention efforts to urban adolescents at high risk of HIV infection.

A number of other major HIV prevention program components such as counseling and testing, health education/risk reduction, and minority initiatives are designed to reach adolescents. A recent national HIV media program was directed to parents and youth. In addition, to help develop targeted programs for minority and other youth who are not in school in selected high incidence cities, CDC is requesting for fiscal year 1991 an increase in funding in order to coordinate, intensify, and increase the efforts and number of organizations that provide HIV education for this population.

ASBESTOS

Mr. Porter: Is the PHS undertaking any activities related to assessing the health risks of asbestos?

Dr. Mason: The National Institute for Occupational Safety and Health (NIOSH) is conducting various scientific studies on the health risks of asbestos: (1) a mortality study assessing the extent of respiratory disease among workers exposed to nonasbestisform asbestos at crushed stone and rock aggregate mine quarries; (2) an animal study to evaluate the effectiveness of chemical treatments intended to reduce the toxicity of chrysotile asbestos; (3) research on the physical characteristics of asbestos fibers to assess the role of these characteristics in the genesis of respiratory disease; (4) research to improve analytic and technologic means of identifying and evaluating asbestos fibers, to support continued epidemiologic and laboratory research on the health risk of asbestos.

Mr. Porter: Is there any merit to the contention that asbestos might be less of a health risk than previously believed?

Dr. Mason: Recent reports have appeared in the scientific literature to suggest that different forms of asbestos are not equally pathogenic (Mossman and Gee, 1989 and Mossman et al., 1990). However, there is a great deal of uncertainty associated with these findings and equally important contradictory evidence. Results from research involving animal bioassays present a strong case that there is no safe form of asbestos. Wagner et al. (1979), of the United Kingdoms's Medical Research Council, have shown that a commercial grade, predominantly short-fiber Canadian chrysotile (a purportedly less hazardous form of asbestos), an ingredient used primarily in paint and in plastic tile fillers, induces mesotheliomas when injected intrapleurally into rats, and induces primary lung neoplasms in rats exposed by inhalation. Not only has chrysotile been found to be as potent as crocidolite and other amphiboles in inducing mesotheliomas when injected intrapleurally (Wagner et al., 1973), it has been found equally potent in inducing pulmonary neoplasms through inhalation exposures (Wagner et al., 1974). Chrysotile also appears to be more potently fibrogenic and carcinogenic than the amphiboles, in relation to the quantity of dust deposited and retained in the lungs of rats (Wagner et al, 1974).

There is the hypothesis that chrysotile is less hazardous because of its chemical and biological reactivity. Chrysotile fibers are much more chemically and biologically reactive than amphibole fibers (Davis et al., 1978; Davis et al., 1986a; and Davis et al, 1986b). In contact with body tissues, chrysotile fibers lose their structural elements and divide into smaller fibrils, making their recognition difficult by the usual analytical methods. In fact, many of the fibers are removed from the lung to other organs in the body and up through the bronchi. However, these findings also support the hypothesis that chrysotile fibers cause cellular injury, fibrosis and lung cancer, but are less readily detected in the tissue after the damage is done. The concentration of dust in the lungs of rats exposed to Canadian chrysotile (referenced above) was only 1.8%-2.2% of the dust concentration in the lungs of animals exposed to amphiboles, after 24 months of inhalation exposure. Yet the lung tumor incidence and degree of pulmonary fibrosis were similar among groups of rats exposed to different forms of asbestos.

At this time, there is no conclusive evidence to justify different public health policy for different asbestos types. The reason for higher incidence of lung cancer and mesothelioma in workers exposed to amphiboles is probably related to higher concentrations of respirable fibers during their exposures (NIOSH, 1979). Furthermore, more commercially exploited deposits of chrysotile are contaminated with some type of the amphibole form of asbestos.

Other international expert groups have reached similar conclusions regarding the uncertainty of the hypothesis that some forms of asbestos may be less hazardous. In a recently released document from an expert panel convened by the World Health Organization in 1989, the panel concluded: "it is difficult to substantiate this difference [in pathogenicity] firmly after standardization for exposure levels, type of industry, duration of employment, etc." This conclusion agrees with the findings of the 1984 report of the Canadian Royal Commission on Matters of Health and Safety Arising from the Use of Asbestos in Ontario. The Commission recommended that textile manufacturing using a form of asbestos purported to be less hazardous (chrysotile) be banned, and concluded that "all fiber types can cause all asbestos-related diseases."

Mr. Porter: Is it true that removal of asbestos may exacerbate health risks?

Dr. Mason: If asbestos-containing material is removed from a building without following safe procedures established for such work, asbestos removal workers and others in the building or area may be exposed. NIOSH has recognized the potentially increased health risks associated with asbestos removal and has consistently recommended that asbestos-containing material not be removed unless it is friable or in an otherwise damaged condition, or if it may become damaged or exposures may occur during construction activities or maintenance of the building. Otherwise, the asbestos-containing material should be left intact and encapsulated, using safe procedures, to prevent future damage and potential exposures of occupants or employees in the building.

TOBACCO

Mr. Porter: Please provide a summary of PHS activities associated with discouraging the use of tobacco products.

Dr. Mason: Several agencies within the Public Health Service have ongoing activities in place to encourage smokers to quit, to prevent the initiation of smoking among young people, and to conduct research to address important unanswered questions about smoking behavior and its effects on health.

Within the Centers for Disease Control (CDC), the Office on Smoking and Health, a Division of the Center for Chronic Disease Prevention and Health Promotion, has the Department of Health and Human

Services' overall lead for tobacco and health activities and is responsible for coordinating U.S. efforts to reduce tobacco consumption. It is the mission of OSH to prevent death, disease, and disability caused by tobacco use and to coordinate a national program to reduce the prevalence of tobacco use in the overall population, as well as in specific target groups such as teenagers. The Office provides researchers with ongoing technical and scientific support. In addition, the Office coordinates information to assist other health organizations, most notably State health departments, in public health prevention and cessation efforts. Surveys of adults and adolescents are performed and analyzed to better understand the trends in smoking prevalence and the reasons why young people begin to smoke and why older people quit smoking. Specifically, CDC is engaged in the following activities:

- Conducting a national prevalence survey and special analyses of teenage smoking behavior, as well as targeting specific information activities to reach this audience. During these past 10 years, OSH has targeted a number of its information efforts to teenage audiences: television, radio, and printed material have been produced and widely distributed.

- Works with State and Territorial education agencies, national organizations, and other youth-serving agencies to help schools develop, evaluate, and improve health education programs that address a full range of health risk behaviors among youth, which include smoking. CDC's evaluation demonstrated that comprehensive school health education is an effective means of helping children improve their health knowledge and attitudes and decreasing the likelihood that they will adopt unhealthy behaviors like smoking.

- Conducts a national public information campaign, with special emphasis on adult and young women. This health education campaign against smoking, that began after the release of the first Surgeon General's report in 1964, has led to a 28% reduction in the prevalence of smoking in America (from 40% in 1965 to 29% in 1987). The Office on Smoking and Health has published Surgeon General's reports since 1964. As a major part of its education campaign, the Office produces media spots for television, radio, and newspapers and other print materials that are used globally.

- Sponsors the Smoking Cessation in Pregnancy (SCIP) project. The SCIP project has focused on translating controlled research results into the prenatal clinic and WIC service routines on a continuous basis, while relying exclusively on existing staff to counsel and educate patients in smoking cessation. Intervention strategies and materials, based on the results of focus groups from prenatal populations, were generated through the SCIP project.

Since 1979, the Office on Smoking and Health has carried on a continuing program to inform the American public of the hazards of cigarette smoking. During these past 10 years the Office has targeted a number of its information efforts to minority audiences. Television spots have been produced to reach minorities. For example, television spots have been produced in various Spanish dialects (Mexican, Cuban, Puerto Rican) and marketed to Spanish speaking TV stations. Another example is seen in a spot produced using popular Black basketball stars to reach young Black males. A variety of radio spots using popular Black and Hispanic artists have also been produced and marketed to ethnic stations. Print ads aimed at Black women as well as Hispanic and Black youths have been distributed to women's magazines and school newspapers.

The Federal Interagency Committee on Smoking and Health, chaired by the Surgeon General, devoted one of its meetings to cover the issue of smoking and its impact on minority populations. In addition, the Office is exploring opportunities to work creatively with minority media professionals and others who work with minority groups.

CDC's Center for Environmental Health and Injury Control (CEHIC) is conducting four research analysis projects on smoking and health. The CEHIC is developing a sensitive assay for serum cotinine to measure levels of cotinine in persons with low levels of smoking exposure. In conjunction with the Office on Smoking and Health, CEHIC is currently conducting the Rhode Island Workplace Smoking Reduction Program. The CEHIC is also conducting a program in conjunction with the New York City Department of Health to determine the affect of restrictions on smoking in the workplace on knowledge, attitudes, and practices.

The National Institute for Occupational Safety and Health (NIOSH) conducts research on the causes of work-related illness and injuries. The NIOSH research efforts relating to problems of smoking and clean indoor air focus on work-related hazards and exposure or interaction with tobacco smoke.

At the National Institutes of Health (NIH), the National Cancer Institute (NCI) has recently supported research in two areas to address tobacco control: (1) the effectiveness of different types of anti-smoking intervention, such as school-based programs, self help strategies, interventions by physicians and dentists, and mass media interventions; and (2) interventions targeted to high-risk populations, including Blacks, Hispanics, women, and heavy smokers. The NCI plans to commit approximately $120 million over the next eight years to the American Stop Smoking Intervention Study, or ASSIST. This project, to be carried out in collaboration with the American Cancer Society, will provide support to approximately 20 States and large metropolitan areas for the development or strengthening of community-based coalitions capable of delivering effective tobacco control interventions. The major objective of this trial is achievement of the Year 2000 Health Objectives for the Nation for tobacco consumption.

NATIONAL SURVEY ON SEXUAL BEHAVIOR

Mr. Porter: I am very disappointed to see that you are not requesting any funds for a national survey of sexual behavior. Do you believe that the Department can effectively target AIDS education efforts without such data?

Dr. Mason: We are now reviewing the elements of the feasibility study component of the proposed Survey of Health and AIDS Risk Prevalence survey. The review is being conducted to assure scientific soundness and sensitivity to the gathering of personal information. Prior to undertaking the feasibility study component, PHS will consult with Congress. The information which is produced from the feasibility study will provide scientifically-valid guidance to design and conduct the larger complete survey.

Education efforts are now being targeted using available data. We believe it essential that our understanding of behaviors relating to the transmission of HIV be improved so that we can do a better job in identifying risk groups. We will then be able to improve the specificity of our educational efforts.

JUSTIFICATION OF THE BUDGET ESTIMATES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

ASSISTANT SECRETARY FOR HEALTH

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OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH

For the expenses necessary for the Office of the Assistant Secretary for Health and for carrying out titles III, [XVII]1/ X, XX and XXI of the Public Health Service Act, [Public Law 100-505, and subtitle D of title II of Public Law 100-607, $77,352,000, together with not to exceed $1,037,000 to be transferred and expended as authorized by section 201(g) of the Social Security Act from the Federal Hospital Insurance and the Federal Supplementary Medical Insurance Trust Funds referred to therein,]2/ *$206,000,000* and, in addition, amounts received by the Public Health Service from Freedom of Information Act fees, reimbursable and interagency agreements and the sale of data tapes shall be credited to this appropriation and shall remain available until expended [:Provided. That in addition to amounts provided herein, up to $14,681,000 shall be available from amounts available under section 2611 of the Public Health Service Act, to carry out the National Medical Expenditure Survey and the Hospital Studies Program]3/.

Explanation of Language Changes

1/ Programs funded under Title XVII are proposed for funding under Title III in FY 1991.

2/ Language has been deleted which refers to activities conducted by the National Center for Health Services Research. This program has been transferred to the Agency for Health Care Policy and Research.

3/ Language has been deleted which refers to activities conducted by the National Center for Health Services Research. This program has been transferred to the Agency for Health Care Policy and Research.

4

Language Analysis

Language Provision	Explanation
"... amounts received by the Public Health Service from Freedom of Information Act fees, reimbursable and interagency agreements and the sale of data tapes shall be credited to this appropriation and remain available until expended."	Provides specific authorization to allow funds collected by the Assistant Secretary for Health from reimbursable and interagency agreements and data tapes to be deposited to this appropriation and to remain available until expended.

Office of the Assistant Secretary for Health

Amounts Available for Obligation

	1989 Actual	1990 Estimate	1991 Estimate
Appropriation:			
Annual........................	$69,325,000	$76,152,000	$206,000,000
Real transfer to: "Health Resources and Services" for AZT funding..................	-165,000	---	---
Comparative transfers from: "Health Resources and Services" for Family Planning program..........	+138,320,000	+139,135,000	---
"Disease Control, Research and Training" CDC, for National Vaccine Program.................	+494,000	---	---
Comparative transfer to: "Health Care Policy and Research", AHCPR, for health services research........................	-25,603,000	-22,930,000	
Subtotal, adjusted budget authority.	182,371,000	192,357,000	206,000,000
Unobligated balance lapsing........	-376,000	---	---
Total obligations 1/............	$181,995,000	$192,357,000	$206,000,000

1/ Excludes the following amounts for reimbursable activities carried out by this account: FY 1989, $33,313,000 and 14 FTEs; FY 1990, $31,643,000 and 15 FTEs; and FY 1991, $31,278,000 and 15 FTEs

Assistant Secretary for Health
Office of the Assistant Secretary for Health

SUMMARY OF CHANGES

1990 appropriation, budget authority.................	$192,357,000
1991 request, budget authority.......................	206,000,000
Net Change.......................................	+$13,643,000

	1990 Appropriation Base		Changes from Base	
	Pos. (FTE)	Budget Authority	Pos. (FTE)	Budget Authority
Increases:				
A. Built-In:				
1. Within-grade increases......	---	$20,444,000	---	+$286,000
2. Annualization of 1990 pay increases.................	---	20,444,000	---	+207,000
3. DHHS Working Capital Fund...	---	346,000	---	+9,000
4. PHS Service and Supply Fund.	---	1,396,000	---	+127,000
5. Federal Employees Retirement System....................	---	566,000	---	+51,000
6. Federal Telecommunications System....................	---	437,000	---	+14,000
7. RENT.......................	---	2,475,000	---	+68,000
8. One extra day of pay........	---	20,444,000	---	+81,000
9. 1991 pay raise and executive pay increases.............	---	20,444,000	---	+826,000
Subtotal, Built-in......				+1,669,000
B. Program:				
1. Disease Prevention.......... For Worksite Health Promotion activities.	17 (17)	4,440,000	+1 (+1)	+50,000
2. Minority Health............. For the Secretary's Minority Health Improvement Initiative and re-examination of task force report.	15 (17)	7,956,000	+13 (+13)	+11,530,000
3. National AIDS Program....... For carrying out increased responsibilities of the office and for ADP expansion.	26 (28)	3,666,000	+5 (+5)	+184,000
4. National Vaccine Program.... For expansion of pertussis vaccine activities.	20 (20)	5,895,000	+5 (+5)	+978,000

	1990 Appropriation Base		Changes from Base	
	Pos. (FTE)	Budget Authority	Pos. (FTE)	Budget Authority
5. PHS Management..............	267	19,376,000	---	+467,000
For restoration of activities deferred in FY 1990 due to absorption of pay raise.	(274)		(---)	
Total, Program			+24	+13,209,000
Total increases......................			(+24)	+14,878,000
Decreases:				
A. Program:				
1. Adolescent Family Life.....	12	9,421,000	---	-51,000
Absorption of built-in increases.	(12)		---	
2. Family Planning............	51	139,135,000	-32	-43,000
Conversion to State - Administered grant program; absorption of built-in increases.	(55)		(-35)	
3. Disease Prevention.........	17	4,044,000	---	-106,000
Reduction in the National Health Objectives program.	(17)		(---)	
4. Physical Fitness...........	15	2,468,000	---	-1,035,000
For non-recurring cost of Special Olympics program and absorption of built-in increases.	(16)		---	
Total, decreases.......			-32 (-35)	-1,235,000
Net Change.............			-8 (-11)	+13,643,000

Office of the Assistant Secretary for Health
Budget Authority by Activity
($ in thousands)

	1989 Actual		1990 Appropriation		1990 Current Estimate		1991 Estimate	
	FTE	BA	FTE	BA	FTE	BA	FTE	Amount
1. National center for health services research								
Program operations	---	---	118	$21,259	---	---	---	---
Program support...	---	---	28	1,671	---	--- 1/	---	---
Subtotal...........	---	---	146	22,930	---	---	---	---
2. Population affairs								
(a) Adolescent family life...........	13	$9,502	12	9,421	12	$9,421	12	$9,431
(b) Family planning.	52	138,273	---	---	55	139,135 2/	20	139,135
Subtotal...........	65	147,775	12	9,421	67	148,556	32	148,566
3. Special health initiatives								
(a) Disease prevention and health promotion......	18	4,429	17	4,440	17	4,440	18	4,461
(b) Physical fitness and sports.....	15	1,307	16	2,468	16	2,468	16	1,499
(c) Minority health.	11	6,343	17	7,956	17	7,956	30	19,550
(AIDS)..........	(1)	(3,394)	(4)	(4,010)	(4)	(4,010)	(5)	(4,588)
(d) National AIDS program office.	20	3,011	28	3,666	28	3,666	33	3,935
(e) National vaccine program........	4	474	20	5,895	20	5,895	25	6,914
Subtotal...........	68	15,564	98	24,425	98	24,425	122	36,359
4. Public health service management..........	295	18,656	274	19,376	274	19,376	274	21,075
Total.......	428	$181,995	530	$76,152	439	$192,357	428	$206,000

1/ Reflects comparative transfer to the Agency for Health Care Policy and Research, in FY 1989, $25,603,000; FY 1990, $22,930,000; FY 1991, $25,061,000.

2/ Reflects comparative transfer from the Health Resources and Services Administration,. in FY 1989, $138,273,000 and in FY 1990, $139,135,000.

Budget Authority by Object

	FY 1990 Appropriation	FY 1991 Estimate	Increase/ Decrease
Total number of full-time permanent positions..............	387	379	-8
Total Compensable work years:			
Full time equivalent employment.	439	428	-11
Full-time equivalent of overtime and holiday hours..............	1	1	---
Average SES salary................	$78,237	$95,219	+$16,982
Average GS grade..................	11.84	11.86	---
Average GS salary.................	$45,651	$46,884	+$1,233
Personnel compensation:			
Full-time permanent.............	$18,681,000	$20,343,000	+$1,662,000
Other than full-time permanent..	1,320,000	1,342,000	+22,000
Other personnel compensation....	443,000	416,000	-27,000
Total personnel comp..........	$20,444,000	$22,101,000	+$1,657,000
Personnel benefits................	3,298,000	3,577,000	+279,000
Travel and transportation of persons......................	917,000	1,010,000	+93,000
Transportation of things..........	54,000	57,000	+3,000
Rent, communications & utilities:			
Rental payments to GSA..........	2,475,000	2,327,000	-148,000
Comm., utilities, misc..........	863,000	931,000	+68,000
Printing & reproduction...........	612,000	492,000	-120,000
Other services....................	5,464,000	6,203,000	+739,000
Project contracts.................	10,577,000	16,521,000	+5,944,000
Supplies..........................	221,000	232,000	+11,000
Equipment.........................	353,000	700,000	+347,000
Grants............................	147,079,000	151,849,000	+4,770,000
Total, budget authority by object.....................	$192,357,000	$206,000,000	+$13,643,000

SIGNIFICANT ITEMS IN HOUSE AND SENATE
APPROPRIATIONS COMMITTEE REPORTS

Item	Action Taken or to be Taken
1990 House Report #101-172	
Minority Participation in PHS Training and Research Programs	
1. The Committee remains concerned over the low level of participation of minority institutions in the training and research programs of the Public Health Service. The Office of Minority Health is an untapped resource that can be used to further the goal of increasing minority participation in these programs. The Committee directs the Office to develop and coordinate such an effort across the PHS.	1. The Office of Minority Health has played a major role in developing and implementing activities associated with the Historically Black Colleges and Universities (HBCU) initiative. The objective of this initiative is to strengthen and expand opportunities for HBCUs to participate in Federally sponsored programs. The Office of Minority Health is providing support to the Departmental coordinator of this initiative. The OMH is conducting technical assistance workshops on grants and contracts proposal development and requirements of PHS sponsored programs. The Office will expand this effort to include institutions comprised predominantly of other minority populations, e.g. Asian/Pacific Islander, Hispanic and Native American.
Regional Offices Reorganization	
2. The Committee would like the opportunity to examine the budgetary implications of any proposed reorganization of the Public Health Service regional office prior to implementation.	2. PHS has examined the operations of the regional offices and is considering several restructuring alternatives. We will discuss our plans with the Committee before initiating any reorganization of the regional offices.

Item	Action Taken or to be Taken
FY 1990 Senate Report #101-127	
Sufficient Staffing Levels	
1. The Committee remains concerned about the difficulty that each PHS agency encounters when trying to acquire sufficient FTE's to effectively utilize the dollar resources provided by this Committee. Major organizational reviews in the last few years have all concluded that a lack of FTE's has been a major obstacle in the PHS battle against AIDS. Therefore, the Committee has included report language associated with the account for the Office of the Assistant Secretary for Health including the FTE levels the Committee directs for both AIDS and non-AIDS activities of the Public Health Service agencies.	1. The current FY 1990 FTE levels reflect the Public Health Service's best estimate of personnel resource requirements, and are consistent with the Senate Report. Each PHS agency's FY 1990 and FY 1991 request reflects the agency's FTE requirements, within the availability of funds, to accomplish its mission and address high priority initiatives. The current FY 1990 PHS FTE level is an increase of 1,450 FTE's above the original FY 1990 President's Budget and 77 FTE's above the levels identified in the Senate Report. If additional FTE's are required during FY 1990 and funding is available, the additional FTE's will be provided to ensure the effectiveness of programs in PHS.
Expanding AIDS Activities	
2. The PHS should continue to gain knowledge and understanding about the disease process -- its origin and nature, genetic and biologic properties of vital strains, the body's response to infection, risk factors, modes of transmission, and the problems of prevalence and incidence. Efforts should be made to accelerate the development, testing, and evaluation of vaccines and new therapeutic drugs, with increased access of minority populations to clinical trials, and increased involvement of community providers in clinical	2. The PHS FY 1991 budget request of $1.7 billion for AIDS represents approximately a 7% increase over the FY 1990 level and addresses many of these high priority areas. For example, NIAID's new Community Programs for Clinical Research on AIDS will increase the involvement of community providers in research activities. The CDC has several initiatives aimed primarily at individuals at increased risk of infection such as its cooperative agreements with States for health education and risk reductions and its community demonstration projects aimed at high risk populations.

trials. Prevention activities should be expanded to inform and educate high-risk populations, the general public, health care workers, and school and college-aged populations to encourage individuals to minimize behavior that increases the risk of spreading or contracting HIV infection. Special emphasis should be placed on designing community-specific interventions which are tailored to the needs of individuals at risk, especially for minorities and IV drug users. Finally, the PHS should expand its programs aimed at AIDS and HIV infection in children and adolescents.

Programs aimed to reach our nation's young people have been implemented to inform and educate school and college-aged youth about HIV within the context of comprehensive school health education. PHS is continuing to expand its efforts related to HIV infection in children through increased research in this area and increased availability of AZT for children with AIDS. The recent establishment of a Task Force on Women, Adolescents and Children with HIV Infection and AIDS will ensure a coordinated PHS approach to these issues.

National Vaccine Program

3. The Committee strongly supports the development and approval of new acellular pertussis vaccines to replace the current whole cell vaccines. The committee believes there is a need for one or more well designed, controlled clinical trials to ascertain which among the candidate pertussis vaccines, including several being investigated by the National Institutes of Health and others that have been used in Japan, are appropriate for licensure in the United States.	3. The NVP is reviewing a number of international sites to carry out a clinical efficacy field trial of acellular pertussis vaccines. The National Institutes of Health has issued a preliminary announcement seeking available field trial sites and responses are being evaluated by a task force of experts working with the NVP to examine issues related to a pertussis clinical field trial site selection, vaccine selection and other study issues. Final arrangements to carry out a vaccine field trial are planned to be concluded in FY 1990.
4. The National Vaccine Program Interagency Groups should make recommendations concerning a small number of candidate vaccines to be tested in clinical trials that approximate the vaccination schedule employed in the United States. The trials should also include a comparison with the currently-used whole cell vaccines to determine relative efficacy. The Committee urges that such recommendations be finalized and the trial or trials commenced as soon as possible.	4. The NIH has issued a preliminary announcement to determine the availability of acellular pertussis vaccines for evaluation as candidates for a clinical field trial. Responses are being evaluated by a task force of experts working with the NVP to examine issues related to a pertussis clinical field trial site selection, vaccine selection and other study issues. The NVP plans to a carry out a pertussis vaccine field trial beginning in FY 1990 or FY 1991. CDC, FDA, and NIH participation in this activity will be coordinated through the NVP consistent with the provisions of the law giving responsibility for coordinating and providing direction to all Federal vaccine activities.

Availability of Acellular Vaccines

5. The availability of acellular vaccines is an urgent health care priority. While the Committee is interested in a coordinated effort to identify appropriate candidate vaccines and to begin additional clinical trials, the Committee does not wish by this action to impede possible approval of any acellular pertussis vaccines currently under review by the Food and Drug Administration.	5. The NVP is proceeding with its search for a field trial site and candidate pertussis acellular vaccines. The NIH is reviewing responses to a preliminary announcement directed to vaccine manufacturers interested in having their acellular pertussis products tested for selection for large-scale clinical field trials. FDA continues its independent review of vaccine investigational new drug and license applications as well as testing and developing evaluation methods of antigen components.

Mission of ADAMHA

6. The Committee views with continuing displeasure efforts to alter the mission of ADAMHA to reduce the services components of ADAMHA's operations. The Committee believes that service activities, including administering the alcohol, drug abuse, and mental health services block grant and conducting services research and demonstrations, are essential to ADAMHA's fulfilling its congressionally approved joint mission of services coupled with research. The Committee notes that any attempt to reorganize or change the functioning of ADAMHA undertaken without the consultation and express consent of the Congress would be met with disapproval and specifically directs the Department to ensure that this does not occur during fiscal year 1990.	6. The PHS is not planning to reorganize or change the functioning of ADAMHA in 1990. However, at the direction of the Congress, and in response to section 2073 of the Anti Drug Abuse Act of 1988, P.L. 100-690, PHS has contracted with the National Academy of Sciences (IOM) to study the..."appropriateness of the administering of health service programs in conjunction with the administration of biomedical and behavioral research...". The results of this study will not be available until May 1991 and will be considered in any future deliberations on modifying ADAMHA's mission. Meanwhile, ADAMHA has strengthened its ability to provide national leadership in the services area by, among other things, establishing the Office for Treatment Improvement.

Pacific Basin Public Health Initiative

7. The Committee has included funding through the Health Resources and Services Administration to continue the important Pacific Basin public health initiative. It is the Committee's intent that the San Francisco regional health administrator and his immediate staff remain responsible for administering this initiative and further, that professional nursing also remains a high priority. The Department is directed to ensure that the San Francisco regional office personnel have sufficient expertise to administer this initiative. It is the Committee's intent that the regional staff will work closely with the Pacific Basin Health Council, an entity established by the Governor of the State of Hawaii, in order to ensure that appropriate attention is given to the recommendations of the public health leadership of the Pacific Basin in establishing this year's programmatic priorities.

7. The San Francisco Regional Health Administrator and his immediate staff will continue to manage the Section 301 Pacific Health Initiative. The Region will work closely with the University of Hawaii School of Nursing and other institutions to address high priority nursing needs in the Pacific. The Regional Health Administrator has a close working relationship with the Office of the Governor, State level offices, including the health science schools of the University of Hawaii, and private organizations active in improving Pacific health systems. As new organizations evolve, such as the Pacific Basin Health Council, the Regional Health Administrator will continue to coordinate ongoing PHS efforts with these Hawaii-based initiatives to ensure appropriate attention to health needs in the Pacific.

AIDS Prevention Efforts

8. The Committee is aware that the Office of Technology Assessment, the General Accounting Office, and the President's AIDS Commission have indicated that scientific evaluation of AIDS prevention programs is one of the most critical gaps in our AIDS prevention efforts. In order to assess the efficacy of prevention efforts and to design effective programs to share information about successful efforts with other communities around the Nation, the Committee believes that CDC and ADAMHA should link their efforts in research and evaluation. The Committee expects the OASH to report on the progress of cooperative efforts when appearing before the Committee next year.	8. The PHS, through CDC and ADAMHA, are linking prevention research and evaluation efforts in several ways. A few examples are the collaboration on a study of behavioral interventions, with CDC focusing on evaluation and NIMH working on design, development and testing of various interventions; co-sponsoring of studies by the National Academy of Sciences on AIDS prevention and evaluation activities; and co-sponsoring of meetings early this year to explore additional collaboration efforts.

Model HIV Education Program for Native Americans

9. The Committee recommends that the Public Health Service develop and implement a broad-scale, comprehensive model program to address HIV education and risk reduction in the Native American population. This program should be designed and implemented in cooperation with the IHS, BIA, universities, and State and local governments. Participation of the tribes is essential. In developing the model program, the Committee urges the PHS to include an evaluation component to identify effective education and risk reduction efforts in this population.	9. During February 1990, CDC will be conducting regional meetings with Native American community leaders and community/tribal-based organizations, to ascertain the current status of HIV prevention services reaching American Indian communities, and to determine community views on how best to fill any current gaps in services. This is to be one of the initial steps in the development of a PHS broad-scale comprehensive model program to address HIV education and risk reduction in the Native American population. Subsequent steps will involve the cooperation of governmental and nongovernmental organizations in the development of

Public Health Service full-time equivalents	culturally-relevant comprehensive prevention strategies. The IHS is kept abreast of the latest developments and issues through its participation in the PHS HIV Leadership Group and the PHS Executive Task Force on AIDS.
10. Though the Committee has continuously expressed concern about constrained FTE levels through language contained in the reports accompanying the appropriations bills, the administration has steadfastly neglected the Committee's direction. It is the Committee's intent that no personnel ceiling may be imposed, or any other action may be taken which would have the effect of restricting PHS programs from carrying out the activities funded by Congress in the DHHS appropriation acts. This restriction would apply to the HRSA; CDC; NIH; the ADAMHA; and OASH. The Committee intends that the PHS programs have the flexibility to use funds appropriated to hire Federal employees to ensure that high priority initiatives for which additional funds are identified in Committee reports can be accomplished. These high priority initiatives include AIDS, biomedical research, substance abuse, mental health, and other activities. The removal of FTE limitation constraints will enable the PHS agencies to hire staff when necessary to act more swiftly and effectively to carry out their responsibilities including appropriate responses to committee directives.	10. The current FY 1990 FTE levels reflect the Public Health Service's best estimate of personnel resource requirements, which are consistent with the Senate Report. Each PHS agency's FY 1990 and FY 1991 request reflects the agency's FTE requirements, within the availability of funds, to accomplish its mission and address high priority initiatives. The current FY 1990 PHS FTE level is an increase of 1,450 FTE's above the original FY 1990 President's Budget and 77 FTE's above the levels identified in the Senate Report. If additional FTE's are required during FY 1990 and funding is available, the additional FTE's will be provided to ensure the effectiveness of programs in PHS.

Conference Report # 101-274

National Vaccine Program Interagency Group

1. The conferees expect that the National Vaccine Program Interagency Group will coordinate all pertussis trials funded through the National Vaccine Program or other funding sources in the Department. In addition, by funding another trial, the conferees do not wish to impede possible approval of any acellular pertussis vaccines currently under review by the Food and Drug Administration.	1. Consistent with provisions of the Public Health Service Act, the National Vaccine Program Interagency Group is coordinating all pertussis trials funded from NVP or other Department funding sources. As the NVP proceeds in its search for a field trial site and candidate pertussis acellular vaccines, FDA continues its independent review of vaccine investigational new drug and license applications as well as testing and developing evaluation methods of antigen components.

Decade of the Brain Symposium

2. In conjunction with the Decade of the Brain, commencing on January 1, 1990, the conferees direct the Assistant Secretary for Health to work with the National Academy of Sciences/Institute of Medicine to sponsor a symposium event to bring together leading scientists from all relevant disciplines to discuss the state of the art and discourse upon short-and long-term goals. Funding shall be provided from available funds, including the one-percent evaluation set-aside.	2. NIMH has already discussed collaborations and is in contract negotiations with the Institute of Medicine on projects related to the Decade of the Brain. The scientific community is eager to build upon the current NIMH neuroscience initiatives to design ambitious but achievable goals for the Decade.

Authorizing Legislation

	1990 Amount Authorized	1990 Appropriation	1991 Amount Authorized	1991 Budget Request
Office of the Assistant Secretary for Health:				
1. Population affairs				
(a) Adolescent family life: PHSA Title XX...	$9,421,000	$9,421,000	1/	$9,431,000
(b) Family planning: PHSA Title X..........	139,135,000	139,135,000	1/	139,135,000
2. Special health initiatives				
(a) Disease prevention and health promotion: PHSA Title XVII.......	10,000,000	4,440,000	$10,000,000	---
PHSA Section 301......	---	---	Indefinite	4,461,000
(b) Physical fitness and sports: PHSA Section 301......	Indefinite	2,468,000	Indefinite	1,499,000
(c) Minority health: PHSA Section 301......	Indefinite	7,956,000	Indefinite	19,550,000
(d) National AIDS program office: PHSA Section 301......	Indefinite	3,666,000	Indefinite	3,935,000
(e) National vaccine program: PHSA Title XXI........	31,000,000	5,895,000	34,000,000	6,914,000
3. Public health service management PHSA Section 301..........	Indefinite	19,376,000	Indefinite	21,075,000
Unfunded Authorizations:				
1. Emergency Response Fund PHSA Section 319..........	30,000,000	---	30,000,000	---
Total Appropriation..........		$192,357,000		$206,000,000

1/ Authorization for PHSA Title X and Title XX expired September 30, 1985. Current year funds are authorized under the Fiscal Year 1990 Appropriations Act, P.L. 101-166. A legislative proposal has been submitted to Congress to establish Family Planning as a State-Administered Grant in FY 1991.

Public Health Service Management

Table of Estimates and Appropriations

Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation 1/
1981	$150,614,000	$160,644,000	$150,644,000	$152,553,000
1982	184,800,000	146,618,000	125,520,000	129,608,000
1983	105,778,000	96,016,000	92,053,000	94,034,000
1984	123,847,000	107,887,000	105,587,000	106,487,000
1985	113,128,000	102,618,000	102,518,000	102,618,000
1986	106,809,000	88,671,000 2/	94,136,000 2/	104,230,000
1986 Sequester	---	---	---	-4,481,000
1987	110,060,000	97,921,000 3/	117,456,000	117,126,000
1988	251,047,000	--- 4/	113,609,000	106,737,000
1989	194,191,000	67,144,000 5/	69,903,000	69,325,000
1990	186,844,000	95,345,000 6/	77,174,000	76,152,000
1990 Sequester	---	---	---	-1,005,000
1991	206,000,000			

1/ Reflects enacted supplementals, rescissions and reappropriations.

2/ House and Senate deferred action on request of $14,729,000 for Adolescent Family Life program.

3/ House deferred action on request of $14,722,000 for Adolescent Family Life program.

4/ House deferred action on OASH request.

5/ House deferred action on request of $9,645,000 for Adolescent Family Life Program.

6/ House deferred action on request of $9,529,000 for Adolescent Family Life Program.

Office of the Assistant Secretary for Health

Account Summary

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
1. Population affairs						
(a) Adolescent family life............	12	$9,421,000	12	$9,431,000	---	+$10,000
(b) Family planning..	55	139,135,000	20	139,135,000	-35	---
Subtotal.............	67	$148,556,000	32	$148,566,000	-35	+10,000
2. Special health initiatives						
(a) Disease prevention and health promotion.......	17	4,440,000	18	4,461,000	+1	+21,000
(b) Physical fitness and sports......	16	2,468,000	16	1,499,000	---	-969,000
(c) Minority health..	17	7,956,000	30	19,550,000	+13	+11,594,000
(AIDS)...........	(4)	(4,010,000)	(5)	(4,588,000)	(+1)	(+578,000)
(d) National AIDS program office..	28	3,666,000	33	3,935,000	+5	+269,000
(e) National vaccine program.........	20	5,895,000	25	6,914,000	+5	+1,019,000
Subtotal.............	98	24,425,000	122	36,359,000	+24	+11,934,000
3. Public health service management..........	274	19,376,000	274	21,075,000	---	+1,699,000
Total..........	439	192,357,000	428	206,000,000	-11	+$13,643,000
AIDS...........	(32)	(7,676,000)	(38)	(8,523,000)	(+6)	(+847,000)

General Statement

The Office of the Assistant Secretary for Health (OASH) appropriation provides resources to support the two major responsibilities of the Assistant Secretary for Health. The first of these functions is the leadership and direction of the activities of the Public Health Service (PHS) agencies. Plans and strategies for accomplishing National health goals are formulated in cooperation with the agencies for implementation throughout PHS. The second major function is the operation of several programs with a variety of missions.

In FY 1991 the Assistant Secretary for Health will continue to direct the PHS agencies and to work with the private sector to protect and improve the health of the American people. PHS activities include research and development, manpower development and training, improving access to health care and preventive health care services, improving the methods and resources required to deliver health care, providing health care to American Indians and Alaskan Natives, protecting the public from unsafe foods, drugs and medical devices, and providing Federal administration of the Health Block Grants to States. To ensure the effective coordination of the AIDS activities conducted throughout PHS, the National AIDS Program Office is located in OASH.

In addition to the overall management responsibility for PHS, the Assistant Secretary for Health directly manages several programs. One of the major priorities of the PHS is the prevention of disease and the promotion of good health practices. The provision of preventive health services, the protection of our environment, and the promotion and adoption of healthy lifestyles represent important ways for individuals and society to reduce major risk factors for disease and early death, and substantially improve the health of Americans. Three OASH programs -- Minority Health, Disease Prevention and Health Promotion, and Physical Fitness -- educate the public about occupational, societal, environmental and behavioral factors which affect health. Efforts are focused on encouraging beneficial lifestyle changes through a variety of programs which include media campaigns, clearinghouses, and workshops. The FY 1991 budget proposes significant increases for health education and promotion activities targeted for minority populations.

Over the last year the Office of Minority Health has assumed increasing responsibilities as the Department's advocate for minority communities in issue areas which impact on the health of minority populations. This Office has been charged with the mission to close the gap in health status between minority groups and non-minority populations by coordinating Departmental initiatives, encouraging the development of innovative strategies to promote health and prevent disease among minority communities, and developing collaborative efforts with PHS agencies and the private sector to achieve mutual objectives of improving the health status of minorities.

The National Vaccine Program is another OASH component involved in PHS prevention efforts. The appropriate administration of safe and effective vaccines remains the most cost-effective method of preventing human suffering and reducing economic costs resulting from vaccine preventable diseases. Clinical field trials and research activities related to the development and introduction of improved vaccines is the highest priority of the National Vaccine Program.

Two programs within OASH--Minority Health and National AIDS Program Office --perform AIDS-related functions. More than 40 percent of all AIDS victims are Black or Hispanic. Therefore, AIDS has been identified as one of the excess killers of minorities. Thus, the Office of Minority Health has specific responsibilities for AIDS and conducts activities that focus on AIDS education and prevention. Culturally sensitive educational materials are developed; technical assistance is provided to minority organizations; and minority community-based organizations are assisted in the dissemination of AIDS information through the Minority Community Health Coalition Grant Program as well as through the AIDS Education/Prevention Grant Program. The National AIDS Program Office advises the Assistant Secretary for Health on all issues related to the HIV infection and coordinates the Federal government's AIDS efforts.

Another program managed within OASH is the Adolescent Family Life (AFL) research and demonstration program which seeks to develop and evaluate effective approaches to the problems associated with adolescent premarital sexual activity, provides care for teens who are already pregnant, and investigates innovative approaches which will encourage adolescents to delay early sexual activity.

In FY 1991, funds are requested in this account for a State-Administered Family Planning Grant program. This will provide the States and territories with resources and more appropriate control over those resources to deliver voluntary family planning services effectively. Under this proposal, the only Federal responsibility would be grant award and monitoring authority which would be delegated to the ten PHS Regional Offices for the "services" component.

The budget request assumes enactment of legislative proposal to extend Title X and Title XX of the PHS Act.

Program Accomplishments

The accomplishments of the Office of the Assistant Secretary for Health (OASH) are related to its twofold mission of providing leadership and direction to the Public Health Service (PHS) agencies and operating several high priority programs. PHS is able to accomplish specific objectives through the efforts of the individual agencies. These accomplishments are addressed in the separate agency budget justifications. Under the leadership of the Assistant Secretary for Health, PHS as an entity can accomplish overall objectives because of the successful interaction of the components when faced with major issues and challenges. This interaction and collaboration is facilitated under the direction of the Assistant Secretary for Health.

The demonstration grant and research components of the Adolescent Family Life program support projects that develop and test innovative and effective means of addressing the problems of adolescent pregnancy. Areas of special emphasis in FY 1989 included encouraging family involvement, promoting adoption as an alternative for pregnant teens who are not prepared to raise a child, and discouraging early sexual activity. Evaluation and dissemination efforts have been broadened and strengthened and final results on approaches tested by earlier demonstration and research projects are now becoming available. Prevention continues to be a major health initiative of PHS, and the Office of Disease Prevention and Health Promotion (ODPHP) is responsible for overall coordination of PHS prevention efforts. In addition to continuing to monitor progress in achieving the 1990 Health Objectives for the Nation, ODPHP has initiated the process to establish health objectives for the next decade. The process is a nationwide effort to gather input involving approximately 200 national professional and voluntary organizations and all States and territorial health departments.

The President's Council on Physical Fitness and Sports (PCPFS) continues its activities through a variety of public awareness programs. A second award has been added to the Presidential Youth Physical Fitness Award Program. The new National Physical Fitness Award recognizes boys and girls at a lower level of achievement than the prestigious Presidential Physical Fitness Award and has potential of motivating 20 million 6-17 year olds to improve their fitness. Public information messages for various populations were distributed through 300 television stations, 2,500 radio stations and 1,400 print media. Over 40,000 requests for fitness information were handled. New publications on walking and basic physical fitness were developed and distributed. Walking as a fitness activity will continue to be highlighted in leadership training clinics and during national walking week as part of the month of May physical fitness and sports activities. Major emphasis on fitness and health at the work place will continue for public and private sector employees. The PCPFS participated in conferences emphasizing fitness and health for American Indians and Alaskan Natives, fitness for protective service personnel and fitness for older adults. The Council held 4 regional clinics on physical fitness and sports to train more than 2,800 leaders in school physical education.

The Office of Minority Health is the focal point for another high priority activity in OASH. In addition to establishing a coordinating process for minority health activities in DHHS, this office funds the Minority Health

Community Coalition Grant Program. New projects funded in FY 1989 include the Continuum Alliance for Healthy Mothers and Children which will address Black infant mortality in Fulton and Terrell counties of Georgia; Community Partnership for the Prevention of Alcohol and Drug Problems Among Latino Youth in Perth Amboy, New Jersey; San Diego Samoan Community Exercise for Better Health Project; and the Fort Defiance Area Native American AIDS Education Project.

The Public Health Service (PHS) sponsored a national conference on HIV Infection and AIDS Among Racial and Ethnic Populations on August 13-17, 1989. Although this was the third conference of this type, for the first time it was sponsored by all of the PHS agencies and planned and organized by the Office of Minority Health. Entitled "Prevention and Beyond: A Framework for Collective Action" this conference included not only issues related to prevention and education, but also aspects of financing of health care, access to experimental therapies and clinical trials, and civil rights. The conference was attended by nearly 3,000 persons, primarily representing community-based organizations, AIDS service organizations and minority and community leaders. The conference resulted in a number of recommendations for future action to combat the HIV/AIDS epidemic in racial and ethnic populations that were developed by the representatives of these groups attending the conference.

In FY 1989 the National Vaccine Program was established as the PHS focal point for achieving optimal prevention of human infectious diseases through immunization and achieving optimal prevention against adverse reactions to vaccines.

Adolescent Family Life

Authorizing Legislation - Title XX, Section 2010 that expired September 30, 1985 (Fiscal Year 1990 funds were appropriated under Public Law 101-166).

FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
FTE	BA	FTE	BA	FTE	BA
12	$9,421,000	12	$9,431,000	---	+$10,000

1991 Authorization........................ Extension proposed

Purpose and Method of Operations

The purpose of The Adolescent Family Life (AFL) program is to develop and test family-centered approaches for providing 1) prevention services to encourage unmarried teens to postpone sexual activity and 2) effective care services for pregnant adolescents and adolescent parents, and 3) to support research that contributes to the understanding of the broad issue of adolescent pregnancy. The AFL program is administered and directed by the Office of Population Affairs, and is the only Federal program solely focused on the complex issues and problems of early adolescent sexuality and adolescent pregnancy and parenting.

In carrying out the mission of the program, priority is given to model demonstration projects serving areas with high need for services, projects utilizing existing available programs and alternative funding sources, projects demonstrating community commitment and involvement, and projects demonstrating innovative and effective approaches. An effort is made in the grant review process to ensure broad geographic coverage, service to a wide variety of racial and ethnic communities, and coverage of both urban and rural settings. Since 1982 the AFL has supported more than 155 geographically diverse demonstration projects and 51 research projects. In FY 1989 there were demonstration project sites in 40 states, the District of Columbia, Puerto Rico and the Virgin Islands.

Prevention demonstration projects are designed to encourage teens to postpone sexual activity. These projects provide values-based sexuality education to teens, pre-teens and their parents, in settings ranging from schools to youth and service organizations. Prevention projects are sponsored by community organizations, school districts, university extension services and national agencies such as the American Red Cross and the American Home Economics Association.

In addition to working directly with teens and pre-teens, some prevention projects train parents to provide sexuality education to their children and to communicate better their own values to their children. Although it is extremely difficult to evaluate the effect of programs designed to affect sexual behavior and pregnancy due to the sensitive nature of the issues involved, some AFL prevention projects are reporting success in changing attitudes and intentions in areas related to the decision about whether or not to become sexually active. The correlates of lessened likelihood of engaging in early sexual activity which are measured in prevention project evaluations include: improved teen-parent communication about sexual matters and values, improved parents' comfort in communicating with their children on sex, changed teens' attitudes and values concerning sexual involvement, and improved understanding of risks of early sexual involvement. Some projects are also able to demonstrate reduced pregnancy rates.

The care demonstration projects address the problems of adolescent pregnancy within the context of the family. These projects emphasize the provision of an array of services and supports designed to enable the pregnant teen to remain within her family setting, receive good prenatal care, continue her education, learn parenting skills and consider carefully the adoption option. Parenting teens and their babies are provided services designed to ameliorate the negative effects of too-early childbearing for both mother and baby.

Independent evaluations conducted in conjunction with AFL care projects have shown that pregnant and parenting teens who received family-centered comprehensive care services have significantly improved health outcomes as compared with groups of matched teens not receiving this type of care. Educational outcomes, as well as improvements in job skills, were also significantly better when comparisons were made to non-client teen parents in retaining teens in school, encouraging those who have dropped out to return and helping teens acquire the credentials and skills necessary to get and hold jobs. More time will have to pass before it can be said with certainty that successes in improving health outcomes, educational attainment and job skills have long-term effects on improving a teen parent's self-sufficiency and reducing welfare dependency. Nonetheless, it is reasonable to project that teen parents who receive these support services and achieve improved outcomes are less likely to require long term welfare support.

Adoption counseling and information is provided by all AFL care projects to help teens decide whether to parent their child or make plans to have the child adopted. Referral to licensed adoption agencies is provided if a pregnant teen requests these services.

The program's research component has concentrated on supporting research projects that can improve our understanding of the issues surrounding adolescent pregnancy. For example: investigating why adoption is currently a little-used alternative among pregnant teens; exploring the factors that influence adolescent sexual, contraceptive and fertility behaviors, examining the nature and effectiveness of care services for pregnant and parenting adolescents. Two evaluation research projects are being conducted to study the effectiveness of the adoption and family involvement program components in currently funded AFL demonstration projects.

Dissemination of the data from evaluated models of services delivery approaches and relevant research includes: distribution of the third edition of The Adolescent Family Life Demonstration Projects: Program and Evaluation Summaries, machine readable summaries of data on a wide variety of research projects dealing with teen sexual activity, teen pregnancy, and programs for pregnant and parenting teens in the Data Archive on Adolescent Pregnancy and Pregnancy Prevention, many research articles published in prestigious journals, and numerous presentations based on AFL projects at professional meetings, conferences, symposiums and conventions at the local, state and Federal levels.

Funding levels for AFL for the past five years are as follows:

1986	$13,978,000
1987	14,000,000
1988	9,630,000
1989	9,529,000
1990	9,421,000

Rationale for the Budget Request

In Fiscal Year 1991, $9,431,000 and 12 FTEs are requested to provide continuation support for 27 care and 24 prevention demonstration projects and 10 research projects. The AFL program is pursuing efforts to ensure that the knowledge gained is objectively evaluated and disseminated to all interested entities. Information has already been provided to policymakers at the State and local level as well as private community groups to assist them in determining the effectiveness of a variety of approaches that may be applicable to their particular area.

In addition to providing support for demonstration and research grant continuations, the FY 1991 request will support funding for 11 new model demonstration projects and 2 new research studies. Results of previously funded AFL research studies and demonstration evaluations will help in developing goals for new demonstration models.

Program Data:

	FY 1990		FY 1991		Increase/ Decrease	
	No.	Amount	No.	Amount	No.	Amount
Demonstration Grants:						
Continuations	18	$2,227,000	51	$4,924,000	+33	+$2,697,000
New	40	4,000,000	11	1,205,000	-29	-2,795,000
Subtotal	58	6,227,000	62	6,129,000	+4	-98,000
Research Grants:						
Continuations	3	381,000	10	1,036,000	+7	+655,000
New	8	800,000	2	210,000	-6	-590,000
Subtotal	11	1,181,000	12	1,246,000	+1	+65,000
Project Contracts	_	357,000	_	365,000	_	+8,000
Total Program	69	7,765,000	74	7,740,000	+5	-25,000
Program Support	_	1,656,000	_	1,691,000	_	+35,000
Total AFL	69	$9,421,000	74	$9,431,000	+5	+$10,000

The FY 1991 budget request of $9,431,000 and 12 FTEs is a net increase of $10,000 over the FY 1990 level, and includes the following built-in costs:

Within-grades and merit pay increases	+$14,000
Federal Employees Retirement System	+2,000
One extra day of pay	+3,000
Annualization of 1990 pay raise	+6,000
1991 pay raise increase	+20,000
Federal Telecommunications System	+9,000
RENT	+4,000
PHS Service and Supply Fund	+3,000
	+61,000

State-Administered Family Planning Program

Authorizing Legislation - Authorizing legislation for Title X expired September 30, 1985; new legislation has been proposed (Fiscal Year 1990 funds were appropriated under P.L. 101-166).

FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
FTE	BA	FTE	BA	FTE	BA
55	$139,135,000	20	$139,135,000	-35	---

1991 Authorization......................... New legislation proposed

Purpose and Method of Operations

The Title X Family Planning Program provides grants to public and private non-profit agencies to support voluntary family planning projects. These projects offer acceptable and effective family planning methods and services on a confidential basis, and are required to give priority to clients who are members of low income families. The Title X Family Planning Program also supports training for family planning providers and staff, information and education activities, and family planning service delivery improvement activities. The program is administered and directed through the Office of Population Affairs. In Fiscal Year 1989 there were 86 services grantees, of which 33 were State or territorial health departments. In an additional 11 states the State Health Department was one of two or more grantees receiving funds. This budget request assumes enactment of the Administration's proposal to change the Family Planning Program from a categorical grant program to a state-administered grant program. Until this proposal is enacted Title X will continue to operate as a categorical program.

During 1989 the number of clients receiving family planning and infertility services in Title X funded clinics remained unchanged at more than 4.3 million. The approximately 4,000 clinic sites providing these services are operated by health departments, hospitals, universities and other public and non-profit agencies. Services are provided at no charge to members of low income families, and according to a sliding fee scale for those with higher incomes.

The other legislatively mandated program components of Title X are:

> Training - supports continuing professional education programs for clinic management and professional staff and provides funds to train approximately 140 nurse practitioners annually.
>
> Services Delivery Improvement - supports research to develop and transfer effective techniques to services delivery programs, and a technical assistance contract for administrative and clinical support to grantees.

Information and Education - supports the development and dissemination of a broad range of materials on contraception, infertility, natural family planning, adoption options, sexually transmitted diseases and adolescent sexuality. During 1989 several new/updated publications were widely distributed.

Funding levels for the Family Planning program for the past five years are as follows:

1986	$136,400,000
1987	142,500,000
1988	139,663,000
1989	138,320,000
1990	139,135,000

Rationale for the Budget Request

The FY 1991 request of $139,135,000 and 20 FTEs assumes enactment of the proposed State Administered Family Planning Program, and would provide $137,576,000 for grants to States and $1,559,000 for program administration. Funding at this level will provide the same support received by the categorical family planning program in FY 1990. Under this proposal, direct awards to support a broad range of acceptable and effective voluntary family planning methods and services, including natural family planning methods, infertility services, services for adolescents and adoption services will be made to the 50 states, the District of Columbia, Puerto Rico, the Virgin Islands and the territories of the Pacific Basin.

All states receiving funds under the proposed State grant program would be required to give priority for services to persons from low income families as is the case with the current program. Grantees would also be required to comply with current restrictions which prohibit use of Title X funds in programs where abortion is a method of family planning. Funds used in previous years to support training, research and information and education activities will be prorated to each of the states based on the level of services funds allocated to them in FY 1989. Because fewer staff would be required to administer a state program there would be additional funds that could be used to provide services, as shown below:

	FY 1989	FY 1990	FY 1991	Change
Program	$135,126,000	$135,693,000	$137,576,000	+$1,883
Program Support	3,194,000	3,442,000	1,559,000	-1,883
Total	$138,320,000	$139,135,000	$139,135,000	---

There are many advantages to changing the manner in which the funds provided by Congress for voluntary family planning services are managed. State control of these funds would provide an opportunity for better integration of health care services and result in improved access, efficiency and responsiveness to local needs, as well as increased State flexibility to meet local needs and standards. The Federal role in administering the program would shift to one of consultation and, as a result, fewer personnel would be required. There are currently 33 states and territories in which a state agency is the single Title X grantee within that state or territory.

The budget request for this activity for FY 1991 is $139,135,000 and 20 FTEs. This is the same level of funding as FY 1990 and includes the following built-in costs:

Within-grades and merit pay increases...........	+$20,000
Federal Employees Retirement System.............	+3,000
One extra day of pay............................	+4,000
Annualization of the 1990 pay raise.............	±9,000
RENT..	+4,000
PHS Service and Supply Fund.....................	+3,000
	+43,000

Disease Prevention and Health Promotion

Authorizing Legislation - Title III and XVII of the Public Health Service Act

FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
FTE	BA	FTE	BA	FTE	BA
17	$4,440,000	18	$4,461,000	+ 1	+ $21,000

1991 Authorization............ Indefinite

Purpose and Method of Operations

The Office of Disease Prevention and Health Promotion (ODPHP) coordinates policies and programs in health promotion and disease prevention within the Public Health Service (PHS). This activity includes: overseeing implementation of the 1990 and year 2000 prevention goals and objectives; coordinating Departmental nutrition policy; disseminating health information to the public through the ODPHP National Health Information Center; and encouraging health promotion, health protection, and preventive services in the public and private sectors. As the principal staff office on prevention in PHS, this activity assists the Office of the Secretary, the Assistant Secretary for Health, and the Surgeon General. The ODPHP focuses on the following areas:

National Health Objectives: In 1979, PHS issued a major agenda for the Nation regarding health promotion and disease prevention, published as a Surgeon General's report, entitled Healthy People. In 1980, Promoting Health/Preventing Disease: Objectives for the Nation identified 226 measurable objectives to meet the goals established in 1979. Following a midcourse review in 1986, ODPHP focused attention on the high priority objectives which appear unlikely to be achieved without additional PHS leadership and began the process of developing revised objectives for the decade leading to 2000. Between 1987 and 1990, ODPHP managed a national consensus development process to identify and draft year 2000 national health objectives. In 1990, a new PHS report will be completed and released, establishing the health promotion and disease prevention plan for the coming decade.

Nutrition: The ODPHP nutrition policy initiative works to strengthen the Department's capabilities and leadership in nutrition research, monitoring, services, and training, as well as food safety and quality and international nutrition. Between 1984 and 1988, ODPHP oversaw the development and publication of the Surgeon General's Report on Nutrition and Health, documenting significant relationships between diet and disease as well as other roles of nutrition in health protection, preventive interventions, and health promotion. This activity leads Departmental efforts to implement the major findings and recommendations of the Surgeon General's Report and serves as the staff liaison between the Department and the Department of Agriculture.

Clinical Preventive Services: The ODPHP Clinical Preventive Services initiative has worked with the U.S. Preventive Services Task Force to define a set of scientifically proven clinical preventive services and continues to work with professional organizations in primary care medicine to promote implementation of these services.

ODPHP National Health Information Center (ONHIC): The ONHIC enables PHS to respond directly to requests for health information, responding to approximately 4,000 requests each month.

Collaborative Public-Private Activities: Through ODPHP, PHS is involved in stimulating and supporting national organizations to incorporate health promotion and disease prevention programs and policies into their organizational agendas. The special focus of these activities is on population groups at highest risk of disease, disability and premature death.

Funding levels for the past five years were as follows:

1986	$2,731,000
1987	3,518,000
1988	3,472,000
1989	4,429,000
1990	4,440,000

Rationale for the Budget Request

The FY 1991 request will permit ODPHP to enter the implementation phase of the newly released goals and objectives for the Year 2000, with specific attention to their implementation for low income and minority population, children, adolescents, and older adults who are deemed to be most at risk. In addition, ODPHP will address issues related to tracking objectives and will begin managing a decade-long series of management progress reviews on the year 2000 objectives for the Assistant Secretary of Health.

The FY 1991 request will support the beginning of the implementation phase of a national resource center for worksite health promotion and the publication of model programs for small businesses and public employment settings.

The FY 1991 request includes funds to support: the ongoing work of the U.S. Preventive Services Coordinating Committee to implement scientifically proven clinical preventive services and to identify areas requiring scientific updates; continue an initiative to coordinate Federal programs in school-based health promotion and disease prevention; continue leadership and coordination of Departmental and interdepartmental nutrition and health policy and program, including special attention to the nutritional status of low-income populations and devising public education on diet, weight-control, and exercise for hard-to-reach populations, and collaborating with private sector organizations to implement the recommendations of the Surgeon General's Report on Nutrition and Health; continue facilitation of network of Healthy Cities" across the Nation; continue support of the Secretary's Council on Health Promotion and Disease Prevention; and continue support of the ODPHP National

Health Information Center to respond to requests for health information and to disseminate timely information on health promotion and disease prevention subjects.

Distribution of Resources
($000)

	FY 1990 Estimate	FY 1991 Estimate	Increase/ Decrease
National Health Objectives*...........	$1,106	$1,000	-$106
Nutrition Activities..................	422	425	+3
Health Information....................	980	1,000	+20
Secretary's Council on HPDP...........	122	100	-22
Worksite Health Promotion.............	310	310	0
Clinical Preventive Services..........	772	775	+3
Administrative/Management.............	728	851	+123
	$4,440	$4,461	+$21

* Includes Cooperative Agreement Program and Healthy Cities

This activity is requesting $4,461,000 and 18 FTEs in FY 1991, a net increase of $21,000 and 1 FTE over the FY 1990 level. The request includes a program decrease of $106,000 in the National Health Objectives Program and the following built-in costs:

Within-grades and merit pay increases.........	+$10,000
Federal Employees Retirement System...........	+3,000
One extra day of pay..........................	+4,000
Annualization of 1990 pay increases...........	+10,000
1991 pay raise................................	+42,000
Federal telecommunications system	+1,000
RENT..	+4,000
PHS Service and Supply Fund...................	+3,000
	+$77,000

Physical Fitness and Sports

Authorizing Legislation - Section 301 of the Public Health Service Act

FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
FTE	BA	FTE	BA	FTE	BA
16	$2,468,000	16	$1,499,000	---	-$969,000

1991 Authorization............	Indefinite

Purpose and Method of Operations

The purpose of this activity is to provide staff support and assistance for the President's Council on Physical Fitness and Sports (PCPFS) which is responsible for a ten-point national program of physical fitness and sports as directed by Executive Order 12399. The program consists of initiatives to promote knowledge and understanding about physical fitness, sports and health and to encourage participation in physical fitness activities. Some current cooperative projects are a videotape funded by Proctor and Gamble for teachers on the Presidential Physical Fitness Award mailed to all school audio-visual libraries a motivational videotape on fitness for children ages 10-12 sponsored by the Sugar Association; a physical fitness essay contest sponsored by the California Raisin Board; a youth physical fitness for baseball project at summer camps funded by the Kellogg's Company; public information pamphlets sponsored by Phillips Petroleum, Life Fitness and Dr. Scholls; and a multi-faceted comic character music video project sponsored by General Foods and others.

Funding levels for the PCPFS for the past five years are as follows:

1986....................................	$1,304,000
1987....................................	1,363,000
1988....................................	1,389,000
1989....................................	1,481,000
1990....................................	2,468,000

Rationale for Budget Request

The 1991 budget request will enable the program to maintain the 1990 level of effort in providing technical assistance to various organizations, public service campaigns, sports medicine symposia, regional leadership training workshops, awards to youth for outstanding physical fitness achievement and publication of research information. Emphasis will be placed on fitness for older adults, Native Americans, the protective services, military, the family and minorities. The PCPFS will continue programs that promote physical fitness for all age groups; establish Governors' Councils on Physical Fitness and Sports; work to establish local, county and Mayors' Councils on Physical Fitness and Sports; promote employee fitness programs; support the State School Physical Fitness Challenge programs and State Demonstration Center

Schools in cooperation with State Departments of Education; and encourage all Federal departments and agencies to support physical fitness programs for their personnel.

In FY 1991 this activity is requesting $1,499,000 and 16 FTEs. This is a net decrease of $969,000 from the FY 1990 appropriation reflecting a non-recurring cost of $986,000 in support of the Lake Tahoe Winter Special Olympics, a program decrease of $49,000, and the following built-in costs:

Within-grades and merit pay increases.........	+$15,000
Federal Employees Retirement System..........	+2,000
One extra day of pay.........................	+3,000
Annualization of 1990 pay increases..........	+6,000
1991 pay raise...............................	+34,000
RENT...	+3,000
PHS Service and Supply Fund..................	+3,000
	+66,000

Minority Health

Authorizing Legislation - Section 301 of the Public Health Service Act

FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
FTE	BA	FTE	BA	FTE	BA
17	$7,956,000	30	$19,550,000	+13	+$11,594,000

1991 Authorization..............Indefinite

Purpose and Method of Operations

In response to growing concern over serious health disparities between the minority and non-minority populations, the Secretary's Task Force on Black and Minority Health was established in 1984. The year-long examination and comprehensive report by the Task Force of experts has given the Department a framework within which to address the complex problems that disproportionately affect the health of minorities in this country. The Office of Minority Health was created as a result of the Task Force's efforts which documented over 60,000 excess deaths per year among Asian/Pacific Islanders, Blacks, Hispanics, and Native Americans. The Task Force Report identified 6 leading causes of excess deaths: cancer, cardiovascular disease, diabetes, substance abuse, violence and infant mortality. AIDS has since been identified as a leading killer of minorities and thus, has become a major focus of the office.

The Office of Minority Health is the focal point for the implementation and monitoring of the Task Force recommendations and for the formulation and development of policy issues affecting minority health. The Office works closely with the Public Health Service agencies and other components of the Department in a catalytic, coordinative, advocacy and policy development role to: (1) assure that minority health care needs are a priority in Departmental resource allocation decisions; (2) establish short term and long-range objectives for Departmental health policies addressing minority populations; (3) develop appropriate monitoring systems to insure that these objectives are met; (4) encourage cooperative and collaborative efforts among PHS agencies to address specific minority health needs; and (5) encourage and initiate the development and use of innovative approaches for decreasing the gap in health status between minority and non-minority populations.

Some improvements in minority health status have been achieved. However, despite numerous efforts, there continue to be large disparities - in almost every category of mortality, death rates for minorities continue to be uniformly higher than for whites. Even more telling is the fact that life expectancy for Black American males is actually declining and is now six years shorter than life expectancy for white males.

The Office of Minority Health was established in FY 1986 and funded in Fiscal Years 1986 and 1987 through assessment of the PHS agencies. Funding levels are as follows:

	Non-AIDS	AIDS	Total
1986...........	$1,914,000	---	$1,914,000
1987...........	3,000,000	---	3,000,000
1988...........	2,872,000	1,436,000	4,308,000
1989...........	2,964,000	3,416,000	6,380,000
1990...........	3,946,000	4,010,000	7,956,000

Rationale for Budget Request

The Fiscal Year 1991 budget for the Office of Minority Health is $19.6 million and 30 FTEs. This request represents a significant expansion of the Department's efforts to improve the health status of our Nation's minority population. The budget increase of $11.6 million falls in 3 major areas:

- -- $10.0 million for the Secretary's Minority Health Improvement Initiative
- -- $1.0 million for the re-examination of the Task Force Report
- -- $0.6 million for AIDS-related activities

Secretary's Minority Health Improvement Initiatives

The Secretary's Minority Health Improvement Initiative is a high priority of the Administration aimed at improving the represention of minorities in the health professions. The Office of Minority Health's efforts will greatly expand by providing increased funding to States and communities, promoting increased coordination of minority health activities among the PHS agencies and other Departmental components, and strengthening the involvement of the private sector in minority health promotion activities. The increase contained in the budget will allow the OMH to expand several of its on-going activities as well as initiate some key new program areas as discussed below:

Minority Community Health Coalition Demonstration Grants

The FY 1991 budget request contains $3,000,000 for continued funding to support innovative community-based risk reduction grants. These demonstration grant projects are based on the concept that greater force for change can be achieved by expanding the base of community awareness, support, and involvement. Since FY 1986, 26 grants located in 18 different states have been funded. These projects have conducted targeted risk reductions efforts in cancer, hypertension, cardiovascular disease and stroke, diabetes, alcoholism, infant mortality, homicide and AIDS in Black, Hispanic, Asian/Pacific Islander and Native American communities.

These grants were originally designed to support risk reduction efforts for a two year period. The 1991 budget requests an increase of $1,800,000 to enhance these grants by creating a three year project period funded in one year budget cycles. Each year, the OMH receives a far greater number of grant applications than it has been able to fund. Changing the method of funding and length of the project period will allow greater availability of grants funds for these community-based coalition projects.

DHHS-Wide Minority Health Coordinating Process

During FY 1991, the Office of Minority Health will continue the Department-wide Coordinating Process which was established as a mechanism to define both short and long range goals and objectives in the six disease areas which lead to excess deaths among minorities and to address the issues of financing and access; health professions development; and data development. This Coordinating Process is designed to go beyond the normal agency-specific efforts to target minority populations by achieving closer interagency coordination around the disease and/or problem areas. The result has been the establishment of nine Health Issues Working Groups which have become integral components to the formulation of minority health goals and objectives, and the basis for the development of a minority health strategic plan. The Working Groups have completed a systematic program assessment of current agency plans to address minority health issues and have developed individual agency-related goals and objectives for minority health programs, and the program needs and gaps which were identified during the program assessments.

Based on the formulation of these goals and objectives, a Minority Health Strategic Plan is being developed. The plan will identify priorities and strategies for achieving short, medium and long-range objectives and will serve as a blueprint for spending any additional resources provided. This task not only includes the development of the plan in conjunction with the appropriate agencies of the Department, but also includes the formulation of policies with respect to strategic plan evaluation and ongoing performance monitoring. The plan will be completed by August 1990.

An increase of $450,000 is being requested to begin implementation and monitoring of the plan in FY 1991. The Heath Issues Working Groups will continue to convene to formulate implementation strategies and specific activities and projects. A computerized system will be developed which will track each agency's activities and will monitor their progress in meeting the goals and objectives contained in the plan.

Office of Minority Health Resource Center

The Office of Minority Health Resource Center (OMHRC), established by the Office of Minority Health in late FY 1987, maintains information on minority health-related resources available at the Federal, state and local levels. Using a computerized system, the OMHRC is building a data base of minority health-related materials, organizations, and programs.

Through its nationwide, toll-free information line, the OMHRC bilingual (English-Spanish) information specialists refer inquiries regarding the six minority health problem areas and AIDS to the appropriate organizations and locate relevant materials.

The OMHRC Resource Persons Network links professionals knowledgeable and active in minority health, who can provide expert assistance, with minority community-based organizations and voluntary groups who want to become more active in health but lack the technical knowledge to do so. The OMHRC assists the OMH in identifying information gaps and in stimulating the development of resources where none currently exist.

An increase of $165,000 is being requested for expansion of the data base and for the Resource Persons Network. It is also expected that use of the Resource Center will increase by both Federal employees and interested parties outside the Federal government.

Historically Black Colleges and Universities (HBCU) Initiative

A total of $150,000 is requested in FY 1991, an increase of $80,000, for expansion of the OMH's HBCU Initiative. Executive Order 12320 called upon Federal agencies to expand opportunities for HBCUs to participate in Federal programs. The OMH actively supports this initiative by conducting technical assistance workshops in grant proposal development and writing.

Faculty members from over 40 HBCUs benefited from two workshops conducted in early FY 1990. Attendees recommended that more technical assistance sessions of this type are needed. The increase requested will support additional workshops in this area. OMH also provides support to the Departmental official who has lead responsibility for coordinating this initiative.

Workshops, Conferences, Public Information

Some examples of the many conferences in which the Office has sponsored or co-sponsored are: a National Conference on Barriers to Health Care Financing in Minority Populations; National Conference on Blacks in Higher Education; the Impact of Race, Sex, and Economics on Risk Prevention and Control of Lung Disease; and the District of Columbia Violence Intervention Conference: "A Matter of Life or Death". Additionally, in response to continued demand for grants writing workshops and the success of OMH's initial efforts, a series of regional workshops are held to cover general grants writing principles, program specific information (i.e., Minority Community Health Coalition Demonstration Program and the AIDS Prevention/Education Program), and small group exercises. An additional $280,000 is included in the request to enable the OMH to conduct additional workshops targeted to specific areas.

Research and Demonstrations

The budget includes $600,000, a $100,000 increase, to support research, demonstrations and evaluations to test new and innovative models, and to develop mechanisms that support better information dissemination, education, prevention and service delivery to minority populations.

New Program Areas

- $250,000 is included to provide support to the Secretary's Initiative on Health Promotion and Disease Prevention for Low-Income Groups and Families to implement and monitor objectives established by the task force.

- $1,000,000 is included to provide technical assistance to approximately 20 statewide offices of minority health. This amount will be used to promote the establishment of additional state offices of minority health and provide consultation on becoming operational, use of networking mechanisms, etc.

- $4,000,000 is requested to develop and enter into interagency agreements, potentially with each of the PHS agencies and staff offices as well as other governmental entities. The OMH, as a catalyst, will use these resources to stimulate the undertaking of innovative approaches/demonstrations to implement the objectives identified in the Department-wide minority health coordinating process.

- $1,000,000 is included in the budget request to develop collaborative projects with voluntary and corporate sector entities such as the March of Dimes and the National Association of Community Health Centers to promote minority health programs and policies.

Task Force Report

In addition to the above-mentioned activities relating to the Secretary's Initiative, the FY 1991 budget request contains an increase of $1,000,000 to begin to update the Secretary's Task Force Report. The original Task Force Report was published in FY 1985. It is time to take another look to see what changes have occurred since that time. This would include supporting selective information collection projects which would clarify the nature and extent of impact of specific health conditions among specific minority populations.

AIDS

Over 40 percent of persons with AIDS are Black or Hispanic. These populations have different risk factors and demographic profiles from the majority population. These differences, often compounded with cultural/language differences, require alternative strategies to convey disease prevention information.

The FY 1991 budget request includes $4,588,000 and 5 FTEs for the following AIDS-related activities conducted by OMH:

Minority Community Health Coalition Demonstration Grants

Of the total Minority Community Health Coalition Grant program operated by the Office of Minority Health, one or two grants are awarded each year to fund community-based demonstration projects with innovative approaches to AIDS education and prevention within minority communities. The FY 1991 budget request includes $400,000 to fund these grants.

AIDS Education/Prevention Grants

The AIDS Education/Prevention Grant Program is a separate grant program created to demonstrate the effectiveness of AIDS/HIV infection education and prevention strategies targeting racial and ethnic minority populations. These grants are awarded to national minority organizations and community-based organizations. Since FY 1988, 38 grants in 22 states have been funded. These projects are targeted to Asian/Pacific Islanders, Blacks, Hispanics and Native Americans. Examples of specific groups addressed by grantees are low income females, intravenous drug users, gay men and women, youths, and shelter residents. These grants expand the range of community-based and national organizations involved in AIDS education/prevention activities and encourage innovative approaches that appropriately address the diversity within and among minority populations. The FY 1991 request contains $2,500,000 for this program.

Workshops, Conferences

In FY 1989, the Office of Minority Health supported the "National Conference on HIV Infection and AIDS among Racial and Ethnic Populations." This conference was attended by nearly 3,000 persons, primarily representing community-based organizations, AIDS services organizations and minority and community leaders. The immediate impact of the conference has been improved networking and information exchange among those working to provide education and services to people affected and infected by AIDS. In FY 1990, the OMH has begun conference follow-up activities, such as disseminating the conference proceedings through the print and electronic media.

The FY 1991 request will allow the Office to continue to conduct follow-up activities, including the potential conduct of local/regional conferences on AIDS and HIV infection in minority populations and planning for a future national conference.

Program Data:	FY 1990	FY 1991	Change
Minority Community Health Coalition Grants	$1,200,000	$3,000,000	+$1,800,000
Minority Community Health Coalition Grants - AIDS	---	400,000	+400,000
Education/Prevention Grant Program - AIDS	2,200,000	2,500,000	+300,000
Minority Health Coordinating Process	150,000	600,000	+450,000
Office of Minority Health Resource Center	535,000	700,000	+165,000
Interagency Agreements	---	4,000,000	+4,000,000
Workshops, conferences	220,000	500,000	+280,000
Workshops, conferences - AIDS	800,000	600,000	-200,000
Assistance to states and private sector groups	---	2,000,000	+2,000,000
Research/demonstrations	500,000	600,000	+100,000
Studies/analyses - AIDS	500,000	500,000	---
Departmental initiatives (HBCU and Health Promotion)	70,000	400,000	+330,000
Re-examination of Task Force Report findings	---	1,000,000	+1,000,000
Administrative/Management Support	1,271,000	2,162,000	+891,000
Administrative/Management Support - AIDS	510,000	588,000	+78,000
TOTAL	$7,956,000	$19,550,000	+$11,594,000

The FY 1991 budget request for the Office of Minority Health of $19,550,000 and 30 FTEs is an increase of $11,594,000 and 13 FTEs over the FY 1990 level. The request reflects a program increase of $11,530,000 and the following built-in costs:

Within-grades and merit pay increases.........	+$12,000
Federal Employees Retirement System...........	+1,000
One extra day of pay..........................	+2,000
Annualization of 1990 pay raise...............	+6,000
1991 pay increase.............................	+38,000
RENT..	+2,000
PHS Service and Supply Fund...................	+3,000
	+64,000

National AIDS Program Office

Authorizing Legislation - Section 301 of the Public Health Service Act.

FY 1990 Appropriation FTE	FY 1990 Appropriation BA	FY 1991 Estimate FTE	FY 1991 Estimate BA	Increase or Decrease FTE	Increase or Decrease BA
28	$3,666,000	33	$3,935,000	+5	+$269,000

1991 Authorization............. .. Indefinite

Purpose and Method of Operations

In response to the growing importance of the HIV epidemic and the continued expansion of AIDS and HIV infection activities throughout the Public Health Service (PHS), the National AIDS Program Office (NAPO) was established to serve as the PHS staff component responsible for coordinating and integrating PHS efforts to prevent and control the occurrence and spread of AIDS and HIV infection. The primary function of the staff of NAPO is to advise the Assistant Secretary for Health (ASH) on the development of policy, setting of priorities, and guidance of implementation with respect to the PHS HIV programs. Through its coordinative and advisory roles, the staff will enable the ASH to decide and act on emerging AIDS and HIV infection policy issues and to provide the overall direction for the PHS AIDS and HIV infection activities.

The NAPO, working closely with the PHS agencies that have HIV/AIDS-related responsibilities and other staff offices and program offices of the ASH and departmental components,is responsible for performing a myriad of functions to coordinate PHS efforts to combat the HIV epidemic:

-- serves as the primary staff support to the ASH for PHS policies and activities concerning HIV-and AIDS-related issues; advises the ASH on appropriate priorities for specific HIV/AIDS activities and programs, and recommends modifications to existing programs or options for establishing new activities in order to maintain timely and appropriate PHS response to the HIV epidemic.

-- coordinates significant PHS activities related to HIV infection and AIDS and promotes interagency information-sharing and cooperation; reviews PHS budget requirements for AIDS-related activities and recommends appropriate budget levels.

-- provides staff support for several interagency groups such as the PHS HIV Leadership Group, PHS Executive Task Force on AIDS and the PHS Federal Coordinating Committee on the HIV Epidemic.

-- monitors PHS progress toward meeting established goals in the effort to prevent and control the HIV epidemic and functions as the key liaison office in information-sharing and policy development for HIV- and AIDS-related programs and activities among PHS agencies, departmental (e.g. the Policy Council and the Budget Review Board), and interdepartmental forums (e.g. PHS Federal Coordinating Committee on the HIV Epidemic and the Domestic Policy Council Work Group on Health).

-- serves as a liaison to external groups, including representatives of State and local governments, national HIV/AIDS constituency groups, local community-based organizations, and other affected private sector organizations.

The National AIDS Program Office was established in FY 1988. Funding levels since that time are as follows:

1988................................	$1,872,000
1989................................	3,023,000
1990................................	3,666,000

Rationale for Budget Request

The FY 1991 budget request of $3,935,000 and 33 FTEs is a net increase of $269,000 and 5 FTEs over the FY 1990 level. This level will enable NAPO to continue to perform the duties as described above and contains the following increases:

-- An additional $130,000 and 3 FTEs is requested to monitor and track the AIDS and HIV infection budget categories by PHS agencies.

-- An additional $50,000 will be used for the acquisition of personal computers, printers and other information services equipment. The new staff will require this equipment for individual use as well as network expansion.

-- Approximately $89,000 and 2 FTEs will provide for two professionals who will work with the PHS agencies and other staff offices and program offices of the ASH and Departmental components in carrying out the increased responsibilities of the office. These duties will include assisting in coordinating responses to the recommendations of the newly established National Commission on AIDS whose report is expected in FY 1991. One of the major responsibilities of NAPO is to be responsive to recommendations from various entities addressing the effort to combat the HIV epidemic; therefore, it will be imperative to have additional staff to accomplish this mission.

The budget request of $3,935,000 and 33 FTEs contains the following built-in costs:

Within-grades and merit pay increases	+$19,000
One extra day of pay	+5,000
Annualization of 1990 pay costs	+13,000
1991 pay increase	+40,000
Federal Telecommunications System	+1,000
RENT	+4,000
PHS Service and Supply Fund	+3,000
	+85,000

National Vaccine Program

Authorizing Legislation - Title XXI, Subtitle 1 of the Public Health Service Act

FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
FTE	BA	FTE	BA	FTE	BA
20	$5,895,000	25	$6,914,000	+ 5	+$1,019,000

1991 Authorization............ $34,000,000

Purpose and Method of Operations

The National Vaccine Program's (NVP) mission is to achieve optimal prevention of human infectious diseases through immunization and to achieve optimal prevention against adverse reactions to vaccines. To accomplish this, the NVP coordinates and directs activities carried out in or through the National Institutes of Health, the Centers for Disease Control, the Food and Drug Administration, the Department of Defense and the Agency for International Development. These activities include vaccine research, development, testing, licensing, production, procurement, distribution and effective use. Priorities for implementing these activities are being established in conjunction with the National Vaccine Advisory Committee and will be included in the National Vaccine Plan and the Report to Congress.

The National Vaccine Program Office was established in FY 1988 and funded through an assessment of the PHS agencies. Funding levels were as follows:

1988......................................	$501,000
1989......................................	494,000
1990......................................	5,895,000

Rationale for Budget Request

In FY 1991 this activity is requesting $6,914,000 and 25 FTEs, an increase of $1,019,000 and 5 FTEs over the FY 1990 appropriation. Of this amount, approximately $5,079,000 is for vaccine program activities and $1,835,000 is for the National Vaccine Program Office. The request will enable the NVP to support its highest priority operations and activities. Clinical field trials and research activities related to the development and introduction of improved (acellular) vaccines remains the highest priority activity of the NVP. The program increase of $978,000 will support expansion of these critical projects.

The recently completed Swedish field trial of two acellular vaccines represented a milestone in the development of improved pertussis vaccines. It is most important that additional field trials begin. First, the efficacy of the vaccines tested was somewhat lower than anticipated and, since there was no whole cell vaccine in the study, it is difficult to judge whether the acellular vaccines were as effective, more effective, or less effective, than existing whole cell vaccines. The Swedish trial did not yield serological correlates of immunity, therefore it is not possible to measure efficacy of other new candidates on the basis of serological response alone. Additional clinical efficacy trials will be needed for these new vaccines. Lastly, some questions were raised in the Swedish trial about the possible relationship between acellular pertussis vaccines and increased risk of systemic bacterial infection. To maximize the likelihood of success, the NVP will carry out a field trial of acellular vaccines (compared to whole-cell vaccine and, if possible, placebo) in settings with an appreciable incidence of pertussis disease.

In addition to a field trial of candidate pertussis vaccine, additional basic and applied research is planned to accelerate the development of new candidate vaccines. This research includes projects to elucidate mechanisms of pathogenesis, identify candidate vaccine antigens, provide improved diagnostic methods, and determine immunity to pertussis. The research will also help the regulatory evaluation of vaccines.

The budget request also provides for the 5 additional staff which will assist the office in complying with the legislative demands to develop a National Vaccine Plan and "coordinate and provide direction for" all vaccine-related activities in the Federal Government.

In FY 1991 this activity is requesting $6,914,000 and 25 FTEs. This is a net increase of $1,019,000 and 5 FTEs over the FY 1990 appropriation and represents a program increase of $978,000 and the following built-in costs:

Annualization of 1990 pay increases...........	+$3,000
1991 pay raise................................	+38,000
	+$41,000

Public Health Service Management

Authorizing Legislation - Section 301 of the Public Health Service Act

FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
FTE	BA	FTE	BA	FTE	BA
274	$19,376,000	274	$21,075,000	---	+$1,699,000

1991 Authorization...................... Indefinite

Purpose and Method of Operations

The purpose of this activity is to support the Assistant Secretary for Health in providing executive leadership and direction to the Public Health Service (PHS). Under the direction of the Assistant Secretary for Health, the PHS agencies are responsible for the implementation of plans and strategies designed to accomplish National health goals. These goals include the protection and advancement of the health of the American people by enforcing laws to assure safe food and effective drugs; conducting and sponsoring biomedical research; assisting state, local governments, and community organizations in the delivery of health services; controlling and preventing disease; developing health resources; administering the Federal health programs for American Indians and Alaskan Natives; and collecting, analyzing and disseminating information about the health of Americans.

The Assistant Secretary for Health's responsibilities include formulating health policy; providing leadership, coordination, and overall direction of PHS programs; providing policy guidance for health-related activities throughout the Department; and conducting international health affairs. The staff offices funded by this activity provide assistance to the Assistant Secretary for Health in carrying out his responsibilities in (1) the direction and coordination of all management activities of the Public Health Service; (2) the development of PHS policy and providing leadership and coordination of health agency activities in financial management, contracts and grants management, personnel management, organizational and management analysis, information resource management (IRM), and facilities management; and (3) assuring compliance with laws, regulations, departmental and PHS management policies, procedures, goals, and plans.

In 1991 this activity will continue to focus on: (1) Efforts to improve debt management practices and procedures, including reporting information on delinquent debts to credit bureaus, referring delinquent debts to collection agencies, and to the Internal Revenue Service (IRS) for collection by offset against Federal income tax refunds, referring written-off debts to the IRS for consideration as taxable income, and collection of debts by administrative action or salary offset. These activities resulted in payments of $79 million to the Treasury in FY 1989. (2) Review and evaluation of program, financial and administrative management control systems through ongoing implementation of the Federal Managers' Financial Integrity Act. And, (3) efforts to develop and implement IRM initiatives and policies and improved electronic communications throughout PHS, coordinate productivity improvement activities in PHS, and carry out special management projects as needed by the Assistant Secretary for Health.

Funding levels for the past five fiscal years are as follows:

1986	$17,714,000
1987	18,736,000
1988	18,339,000
1989	18,698,000
1990	19,376,000

Rationale for the Budget Request

The FY 1991 budget request of $21,075,000 and 274 FTEs provides a level of resources that will enable the Assistant Secretary for Health to continue to provide leadership and direction to the Public Health Service. The resources requested for this activity are an increase of $1,699,000 over the FY 1990 level. Staffing is maintained at the FY 1990 level of 274 FTEs.

The FY 1991 budget request of $21,075,000 and 274 FTEs includes a program increase of $467,000 to restore funds for activities, such as the replacement of antiquated automated equipment, that were deferred from FY 1989 and FY 1990 to FY 1991 and $1,232,000 for built-in costs as follows:

Within-grade and merit pay increases	+$196,000
Annualization of 1990 pay raise	+154,000
One extra day of pay	+60,000
DHHS Working Capital Fund	+9,000
PHS Service and Supply Fund	+109,000
Federal Employee Retirement System	+40,000
FTS	+3,000
RENT	+47,000
January 1991 pay raise and executive pay increase	+614,000
	+1,232,000

STATE ADMINISTERED FAMILY PLANNING PROGRAM

FUNDING BY STATE

	FY 1989	FY 1990	FY 1991
Alabama	$3,157,000	$3,170,000	$3,214,000
Alaska	297,000	298,000	302,000
Arizona	2,504,000	2,515,000	2,549,000
Arkansas	2,029,000	2,038,000	2,066,000
California	12,810,000	12,864,000	13,043,000
Colorado	1,547,000	1,554,000	1,575,000
Connecticut	1,229,000	1,234,000	1,251,000
Delaware	522,000	524,000	530,000
District of Columbia	534,000	536,000	544,000
Florida	4,900,000	4,921,000	4,989,000
Georgia	4,325,000	4,343,000	4,403,000
Hawaii	782,000	785,000	796,000
Idaho	676,000	679,000	688,000
Illinois	4,085,000	4,102,000	4,159,000
Indiana	2,934,000	2,946,000	2,988,000
Iowa	1,764,000	1,771,000	1,796,000
Kansas	1,291,000	1,296,000	1,315,000
Kentucky	3,168,000	3,181,000	3,225,000
Louisiana	2,608,000	2,619,000	2,656,000
Maine	905,000	909,000	922,000
Maryland	2,366,000	2,376,000	2,409,000
Massachusetts	3,464,000	3,479,000	3,526,000
Michigan	3,485,000	3,500,000	3,549,000
Minnesota	1,687,000	1,695,000	1,717,000
Mississippi	3,090,000	3,103,000	3,[illegible]5,000
Missouri	2,936,000	2,948,000	2,990,000
Montana	861,000	865,000	877,000
Nebraska	990,000	994,000	1,008,000
Nevada	839,000	843,000	855,000
New Hampshire	575,000	577,000	586,000
New Jersey	4,617,000	4,636,000	4,700,000
New Mexico	1,216,000	1,221,000	1,238,000
New York	7,709,000	7,741,000	7,849,000
North Carolina	4,053,000	4,070,000	4,126,000
North Dakota	426,000	428,000	434,000
Ohio	5,190,000	5,212,000	5,284,000
Oklahoma	2,074,000	2,083,000	2,112,000
Oregon	1,758,000	1,765,000	1,790,000
Pennsylvania	7,180,000	7,210,000	7,310,000
Rhode Island	353,000	355,000	360,000
South Carolina	3,120,000	3,133,000	3,176,000
South Dakota	362,000	364,000	368,000
Tennessee	3,986,000	4,003,000	4,059,000
Texas	8,515,000	8,551,000	8,669,000
Utah	546,000	548,000	556,000
Vermont	456,000	458,000	464,000
Virginia	2,726,000	2,737,000	2,775,000

	FY 1989	FY 1990	FY 1991
Washington	2,560,000	2,571,000	2,607,000
West Virginia	1,253,000	1,258,000	1,276,000
Wisconsin	2,133,000	2,142,000	2,171,000
Wyoming	505,000	507,000	514,000
American Samoa	53,000	53,000	54,000
Fed. States of Micronesia	80,000	80,000	81,000
Guam	107,000	107,000	109,000
Marshall Islands	28,000	28,000	29,000
N. Mariana Islands	45,000	45,000	45,000
Palau	24,000	24,000	25,000
Puerto Rico	1,467,000	1,473,000	1,494,000
Virgin Islands	224,000	225,000	228,000
TOTAL PROGRAM	$135,126,000	$135,693,000	$137,576,000
PROGRAM SUPPORT	$3,194,000	$3,442,000	$1,559,000
TOTAL	$138,320,000	$139,135,000	$139,135,000

NOTE: Distribution of FY 1990 and FY 1991 funds to States were made in the same ratio that the States received funds for services in FY 1989.

New Positions Requested

	1991		
	Grade	Number	Annual Salary
Minority Health			
Public Health Analyst	GS-14	1	$50,342
Public Health Analyst	GS-13	1	42,601
Public Health Analyst	GS-12	3	107,475
Program Analyst..............	GS-12	1	35,825
Program Analyst..............	GS-11	1	29,891
Research Assistant	GS-09	1	24,705
Administrative Assistant.....	GS-09	1	24,705
Clerk Typist..................	GS-05	4	65,220
		13	$380,764
National AIDS Program Office			
Program Analyst..............	GS-13	1	$42,601
Program Analyst..............	GS-12	1	35,825
Computer Analyst.............	GS-12	1	35,825
Secretary Typing.............	GS-07	2	40,390
		5	$154,641
Disease Prevention /Health Promotion			
Project Officer..............	GS-14	1	$50,342
		1	$50,342
National Vaccine Program			
Project Officer..............	GS-14	1	$50,342
Research Analyst.............	GS-14	1	50,342
Budget Officer...............	GS-12	1	35,825
Secretary....................	GS-07	1	20,195
Secretary....................	GS-06	1	18,174
		5	$174,878
Total...........		24	$760,625

OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH

Detail of Permanent Positions

	FY 1990 Estimate	**FY 1991 Estimate**
ES-05	1	1
ES-04	11	11
ES-03	2	2
ES-02	0	0
ES-01	2	2
Subtotal	16	16
GS-15	57	58
GS-14	75	75
GS-13	71	68
GS-12	23	24
GS-11	12	11
GS-10	5	5
GS-09	21	22
GS-08	17	17
GS-07	24	23
GS-06	10	11
GS-05	8	9
GS-04	7	5
GS-03	0	0
GS-02	0	0
GS-01	0	0
Subtotal	330	328
CO-09	0	0
CO-08	5	5
CO-07	9	8
CO-06	10	9
CO-05	10	8
CO-04	3	1
CO-03	2	2
CO-02	0	0
CO-01	0	0
Subtotal	39	33
Ungraded	2	2
TOTAL	387	379

ADVISORY AND ASSISTANCE SERVICES

Office of the Assistant Secretary for Health

(in thousands of dollars)

OASH 75-1101-0-1-550		FY 1989	FY 1990	FY 1991
I. Contractual Services				
Individual Experts and Consultants	B.A.	0	0	0
	Oblig.	0	0	0
	Outlays	0	0	0
Studies, Analyses, and Evaluations	B.A.	360	366	366
	Oblig.	1,763	1,829	1,829
	Outlays	311	318	318
Management and Professional Support Services	B.A.	35	35	35
	Oblig.	236	243	243
	Outlays	29	29	29
Engineering and Technical Services	B.A.	0	0	0
	Oblig.	0	0	0
	Outlays	0	0	0
Subtotal	B.A.	395	401	401
	Oblig.	1,999	2,072	2,072
	Outlays	340	347	347
II. Personnel Appointments	B.A.	44	44	44
	Oblig.	44	44	44
	Outlays	44	44	44
III. Advisory Committees	B.A.	65	105	115
	Oblig.	65	105	115
	Outlays	62	100	110
Total, AAS	B.A.	504	550	560
	Oblig.	2,108	2,221	2,231
	Outlays	446	491	501

Office of the Assistant Secretary for Health

AAS Narrative Summary

I. Contractual Services

The large majority of obligations for contractual services incurred by the Office of the Assistant Secretary for Health (OASH) are for reimbursable programs, primarily for evaluation of PHS programs as provided by Section 2611 of the Public Health Service. Advisory and assistance services contracts for programs funded directly by OASH are utilized for studies and evaluations that assist the programs in carrying out functions such as the objective review of applications for research and demonstration grants. Other uses include conference management, policy research studies and reports, and the provision of technical assistance for demonstration programs.

II. Personnel Appointments

Individual experts and consultants are utilized when the specific expertise is not available and is not required on a permanent basis. The employment of consultants under these circumstances minimizes the Federal investment in limited term projects while permitting the use of highly qualified experts.

III. Advisory Committees

OASH incurs expenses for the operation of the following committees that were established by Federal law: The National Vaccine Advisory Committee and the President's Council on Physical Fitness and Sports. These expenses are primarily for members' travel, per diem, and salary expenses to attend Committee meetings.

Office of the Assistant Secretary for Health
HIV/AIDS Supplemental Material
(dollars in thousands)

	1989 Actual		1990 Appropriation		1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	Amount	FTE	Amount
Office of Minority Health	1	$3,416	4	$4,010	5	$4,588	+1	+$578
National AIDS Program Office	20	3,023	28	3,666	33	3,935	+5	+269
Total......	21	$6,439	32	$7,676	38	$8,523	+6	+$847

Two programs within the Office of the Assistant Secretary for Health, the Office of Minority Health and the National AIDS Program Office, perform AIDS-related functions. Specific focus or areas of concern are as follow:

The Office of Minority Health (OMH) was established to assure that minority health care needs are a priority in Departmental resource allocation decisions. Over 40 percent of all people with AIDS are Black or Hispanic; these populations have different risk factors and demographic profiles. The OMH AIDS activities focus on the unique needs of these minority populations. The AIDS activities in the OMH focus on: supporting the development of culturally sensitive and culturally appropriate educational materials; providing technical assistance to minority organizations in the design, implementation, and evaluation of effective prevention programs; and assisting minority community-based organizations in the dissemination of AIDS information through demonstration projects and grant programs.

The National AIDS Program Office (NAPO) is the PHS staff component responsible for coordinating and integrating PHS efforts to prevent and control the occurrence and spread of AIDS and HIV infection. The primary function of NAPO is to advise the Assistant Secretary for Health (ASH) on the development of policy, setting of priorities, and the implementation of all PHS HIV/AIDS programs. Through its coordination and advisory roles the staff will enable the ASH to set the overall direction of PHS AIDS and HIV infection activities.

JUSTIFICATION OF THE BUDGET ESTIMATES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

ASSISTANT SECRETARY FOR HEALTH

Retirement Pay and Medical Benefits for Commissioned Officers

FY 1991 Budget

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RETIREMENT PAY AND MEDICAL BENEFITS FOR COMMISSIONED OFFICERS

For retirement pay and medical benefits of Public Health Service Commissioned Officers as authorized by law, and for payments under the Retired Serviceman's Family Protection Plan and Survivor Benefit Plan and for medical care of dependents and retired personnel under the Department's Medical Care Act (10 U.S.C. ch. 55) and for payments pursuant to section 229(b) of the Social Security Act (42 U.S.C. 429(b)), such amounts as may be required during the current fiscal year.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

ASSISTANT SECRETARY FOR HEALTH

Retirement Pay and Medical Benefits for Commissioned Officers

Amounts Available for Obligation

	FY 1989 Actual	FY 1990 Appropriation	FY 1991 Estimate
Appropriation..........	$104,678,000	$112,604,000	$118,116,000
Total obligations....	$104,678,000	$112,604,000	$118,116,000

SUMMARY OF CHANGES

1990 Appropriation	$112,604,000
1991 Request	118,116,000
Net change	+5,512,000

	FY 1990 Current Estimate Base		Change from Base	
	Pos. (FTE)	Budget Authority	Pos. (FTE)	Budget Authority
Increases:				
1. Annualization of the FY 1990 COLA and for the projected net increase of retirees during FY 1991	---	$87,249,000	---	+$3,797,000
2. Annualization of the FY 1990 COLA and for the projected net increase of survivors during FY 1991	---	5,279,000	---	+404,000
3. Projected increase of 5.9% in costs of medical care.	---	16,986,000	---	+1,002,000
4. Payment to SSA for DHHS military service credits.	---	3,090,000	---	+309,000
Total increases			---	+$5,512,000
Net change			---	+$5,512,000

Budget Authority by Activity

	FY 1989 Actual	FY 1990 Appropriation	FY 1991 Estimate
Retirement payments.......	$80,008,000	$87,249,000	$91,046,000
Survivors' benefits.......	4,703,000	5,279,000	5,683,000
Medical care..............	13,273,000	16,986,000	17,988,000
Military service credits..	6,694,000	3,090,000	3,399,000
Total........	$104,678,000	$112,604,000	$118,116,000

Budget Authority by Object

	FY 1990 Appropriation	FY 1991 Estimate	Increase/ Decrease
Benefits for former personnel..................	$92,528,000	$96,729,000	+$4,201,000
Other services.............	20,076,000	21,387,000	+1,311,000
Total budget authority by object....................	$112,604,000	$118,116,000	+$5,512,000

Authorizing Legislation

	FY 1990 Amount Authorized	FY 1990 Appropriation	FY 1991 Amount Authorized	FY 1991 Estimate
1. Retirement payments Chapter 6A of Title 42, U.S.C.	Indefinite	$87,249,000	Indefinite	$91,046,000
2. Survivors' benefits Chapter 73 of Title 10, U.S.C.	Indefinite	5,279,000	Indefinite	5,683,000
3. Medical care Chapter 55 of Title 10 U.S.C., P.L. 89-614	Indefinite	16,986,000	Indefinite	17,988,000
4. Military service credits Section 229(b) of the Social Security Act.	Indefinite	3,090,000	Indefinite	3,399,000

Retirement Pay and Medical Benefits for Commissioned Officers

Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
1981	$91,958,000	$91,958,000	$91,958,000	$81,679,000
1982	106,172,000	106,172,000	106,172,000	105,941,000
1983	85,433,000	77,102,000	77,102,000	71,325,000
1984	78,883,000	74,438,000	74,438,000	73,750,000
1985	86,448,000	78,5[illegible],000	78,589,000	71,774,000
1986	97,129,000	83,157,000	83,157,000	83,157,000
1986 Sequester	---	---	---	2,708,000
1987	91,282,000	86,282,000	86,282,000	84,330,000
1988	94,176,000	89,859,000	89,859,000	89,859,000
1989	107,687,000	104,315,000	104,315,000	104,678,000
1990	110,201,000	105,201,000	105,201,000	112,604,000
1991	118,116,000			

Justification

Retirement Pay and Medical Benefits for Commissioned Officers

	FY 1990 Appropriation	FY 1991 Estimate	Increases or Decreases
Retirement payments..........	$87,249,000	$91,046,000	+$3,797,000
Survivors' benefits..........	5,279,000	5,683,000	+404,000
Medical care.......	16,986,000	17,988,000	+1,002,000
Military service credits...........	3,090,000	3,399,000	+309,000
Total budget authority.....	$112,604,000	$118,116,000	+$5,512,000

General Statement

This appropriation provides for retirement payments to Public Health Service (PHS) officers who are retired for age, disability, or a specified length of service as well as for payments to survivors of deceased retired officers who had elected to receive reduced retirement payments.

This account also funds the provision of medical care to active duty and retired members of the PHS Commissioned Corps, and to dependents of active duty, retired and deceased members of the PHS Commissioned Corps. In addition, this account includes amounts to be paid to the Social Security Administration for military service credits which are earned by active duty DHHS Commissioned Officers for non-wage income.

The FY 1991 request includes an increase of $5,512,000 over the FY 1990 level. This amount reflects increased medical benefits costs, an annualization of amounts paid to retirees and survivors in FY 1990, a net increase in the number of retirees and survivors during FY 1991, and an increase in the amount of military service credits. Consistent with all Federal retirement plans, a cost-of-living adjustment (COLA) is not being requested for FY 1991.

The Administration is also proposing, for later transmittal, a legislative proposal to establish an accrual retirement system for PHS officers. This proposal is more fully discussed in the section entitled PHS Commissioned Officers Retirement Fund.

Retirement Payments

Authorizing legislation - Chapter 6A of Title 42 U.S.C.

1991 Authorization: Indefinite

FY 1990 Appropriation	FY 1991 Estimate	Increase or Decrease
$87,249,000	$91,046,000	+$3,797,000

Purpose and Method of Operation

The purpose of this activity is to provide mandatory payments to Commissioned Officers of the Public Health Service who have been retired for age, disability or specified length of service.

Funding levels for the past five fiscal years were as follows:

1986	$67,205,000
1987	69,355,000
1988	73,700,000
1989	80,008,000
1990	87,249,000

Rationale for the FY 1991 Budget Request

The FY 1991 request of $91,046,000, which is an increase of $3,797,000 over the FY 1990 level, will support payments to an estimated 2,550 retired officers. The increase will fund the annualization costs of the FY 1990 COLA and the projected net increase of 78 retirees during FY 1991.

The FY 1991 estimates are based on payments to the following number of retirees:

Period Ending	Total	Net Increase
September 30, 1989, actual	2,394	N/A
September 30, 1990, (est.)	2,472	78
September 30, 1991, (est.)	2,550	78

Survivors' Benefits

Authorizing legislation - Chapter 73 of Title 10 U.S.C.

1991 Authorization: Indefinite

FY 1990 Appropriation	FY 1991 Estimate	Increase or Decrease
$5,279,000	$5,683,000	+$404,000

Purpose and Method of Operation

This activity provides for the payment of annuities to survivors of retired officers who had elected to receive reduced retirement payments under the Retired Serviceman's Family Protection Plan and Survivor's Benefit Plan. This program is financed by the Federal Government although deductions are made in the retirement payments to the officers who elect the option of survivors' benefits.

Funding levels for the past five years were as follows:

1986	$3,543,000
1987	3,895,000
1988	4,317,000
1989	4,703,000
1990	5,279,000

Rationale for FY 1991 Budget Request

The FY 1991 request of $5,683,000, which is an increase of $404,000 over the FY 1990 level, will provide payments for an estimated 405 annuitants. The increase will fund the annualization costs of the FY 1990 COLA and the projected net increase of 23 survivors receiving benefits in FY 1991.

The FY 1991 estimates are based on payments to the following numbers of annuitants:

Period Ending	Total	Net Increase
September 30, 1989, actual	359	N/A
September 30, 1990, (est.)	382	23
September 30, 1991, (est.)	405	23

Medical Care

Authorizing legislation - Chapter 55 of Title 10 U.S.C.

1991 Authorization: Indefinite

FY 1990 Appropriation	FY 1991 Estimate	Increase or Decrease
$16,986,000	$17,988,000	+$1,002,000

Purpose and Method of Operation

This program provides for the cost of medical care rendered in non-Federal and in uniformed service facilities to active duty and retired PHS commissioned officers and dependents of eligible personnel.

This activity fulfills the mandatory medical care obligations of the Public Health Service to Commissioned Officers and their dependents. Medical care to eligible beneficiaries is authorized under the Dependents' Medical Care Act, as amended by P.L. 89-614, which allows for an expanded and uniform program of medical care to active duty and retired members of the uniformed services, and dependents of active duty, retired and deceased members. Health care provided in a uniformed service facility is billed directly to the Public Health Service by that organization. When medical care is provided to dependents or retirees in a private facility, the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) acts as the Government's agent to arrange payment and, in turn, bills the Public Health Service for the services rendered. In addition, contract medical care is arranged for active duty officers who are not stationed in an area accessible to uniformed facilities.

Funding and beneficiary levels for the past five years were as follows:

	Funding Level	Total Beneficiaries
1986................................	$9,700,000	24,600
1987................................	11,080,000	24,900
1988................................	11,689,000	25,400
1989................................	13,273,000	25,900
1990................................	16,986,000	26,800

Rationale for FY 1991 Budget Request

The request of $17,988,000 will provide medical care for approximately 27,800 eligible beneficiaries. The FY 1991 request reflects increases in the cost of drugs and inpatient and outpatient care for all beneficiaries in Federal and non-Federal facilities.

Military Service Credits

Authorizing Legislation - Section 229(b) of the Social Security Act.

1991 Authorization: Indefinite

FY 1990 Appropriation	FY 1991 Estimate	Increase/ Decrease
$3,090,000	$3,399,000	+$309,000

Purpose and Method of Operation

The purpose of this activity is to make payments to the Social Security Administration to reimburse the Federal old-age and survivors insurance (OASI) and disability insurance (DI) trust funds for the costs to the trust funds of granting non-contributory credit for military service.

The Social Security Amendments of 1967 added Section 229(b) of the Social Security Act, affecting credit for military service performed after December 1967. The pay of a person in the uniformed services, after December 1967, is deemed to be up to $300 more than his/her basic pay in each calendar quarter, to cover the value of non-wage income, such as food, shelter and medical services. The Social Security Amendments of 1972 amended the law to provide noncontributory wage credits of $300 per quarter for military service performed after 1956. The Social Security Amendments of 1977 further amended the law to provide noncontributory wage credits of $100 for each $300 of actual wages earned up to a maximum credit of $1,200 for any calender year after 1977.

The Social Security Amendment of 1983 also modified Section 229(b) to require that trust funds be paid on a taxes-due instead of a benefits-paid basis beginning in calendar year 1984. The 1983 amendments authorized a lump sum payment to put the trust funds in the same financial position they would have been in if the reimbursement to the trust funds for post-1956 military service credit for prior years (1957-1983) had been financed on this new basis. For calendar year 1984 and later, the trust funds will be reimbursed annually on July 1 for the OASDI employer-employee taxes on the post-1956 wage credits for military service for the same calendar year. Proper adjustment will be made in amounts authorized to be appropriated to the extent prior estimates were in excess or less than actual wages deemed to be paid.

The Public Health Service began making payments to SSA in FY 1989. Funding levels for the past two years were as follows:

1989..	$6,694,000
1990..	3,090,000

Rationale for the FY 1991 Budget Request

The FY 1991 request for military service credits is $3,399,000. The entire amount will be paid to the Social Security Administration for FY 1991.

Public Health Service (PHS) Commissioned Officers Retirement Fund

Authorizing legislation - to be proposed

Purpose and Method of Operations

The Retired Pay and Medical Benefits for Commissioned Officers account funds the retirement benefits of PHS Commissioned Corps Officers, their dependents and survivors, as well as medical benefits to dependents. Entitlement benefits funded through this account are identical to benefits provided to all other uniformed services.

The Commissioned Corps retirement system is a pay-as-you-go system in which benefits paid to current retirees are annually appropriated. No funds are set aside during the employees' active service to accrue towards funding retirement. As of September 30, 1989, the PHS Commissioned Corps Retirement System had a total unfunded liability of $3.9 billion.

Public Law 98-94 converted the military retirement fund from a pay-as-you-go system to an accrual-based system to improve the financial management of the Federal Government. In 1986, Congress established the Federal Employee Retirement System (FERS), an accrual-based system designed to fund in full Federal employee retirement benefits, which will replace the old quasi-pay-as-you-go Civil Service Retirement System as increasing numbers of new Federal employees automatically fall under the FERS.

Consistent with the military and civilian retirement systems, the FY 1991 budget proposes to convert the Commissioned Corps retirement system to an accrual-based system. The proposed change will increase budget authority and outlays for Commissioned Corps retirement in the short run, but will not effect the level of benefits received or the total program outlays.

The following table summarizes the current and proposed structure for fully funding the PHS Commissioned Corps Retirement System on an actuarially sound basis.

PHS Commissioned Officers Retirement Fund

Item	Existing Funding	Proposed Mechanism
Current Retirees (Unfunded Liability)	FY 1991 cost: $96.7 million for current retirees and survivor's of retirees. Funded through pay-as-you-go system, annually appropriated. Total unfunded liability for PHS Commissioned Corps retirement system is estimated at $3.9 billion.	Estimated $96.7 million would continue to be paid from current appropriation account, but be paid into the new trust fund instead of directly to retirees. New trust fund would pay current retirees and survivor's benefits.
Current Employees Future Benefits (Funded Liability)	Not funded under current system.	Proposed to be funded through old appropriation account; FY 1991 estimate of $86.1 million which will be deposited into trust fund and invested in public securities for future benefit payments.
Current Employees (Unfunded Liability)	Not funded under current system.	Proposed to be funded through new appropriation account; FY 1991 estimate of $62.9 million is the unfunded liability of current employees amortized over 40 years. Amount will be deposited into trust fund and invested in public securities for future benefit payments

Total budget authority and outlays for the retirement system, in the long run, will be no higher than under the old system. This proposal will not affect the benefit levels of PHS Commissioned Corps Officers, whether retired or currently employed.

JUSTIFICATION OF THE BUDGET ESTIMATES

Human Immunodeficiency Virus/AIDS Program

General Statement

Acquired immunodeficiency syndrome (AIDS), caused by the immunodeficiency virus (HIV), continues to be the number one health priority of the Public Health Service (PHS). Despite the progress that has been made in biomedical research and prevention programs, this disease is a public health threat that continues to touch the lives of Americans with frightening consequences. In response to this public health problem, the FY 1991 President's budget request includes $1.7 billion and 2,862 Full-Time Equivalents (FTEs) for research, prevention, and other activities connected with the battle against this disease. This request includes a $109 million (7%) increase over the FY 1990 appropriation. The FTE request includes an increase of 301 FTEs (12%) over FY 1990. As shown by the following table, the PHS HIV/AIDS budgets increased almost 7 fold from FY 1986 to FY 1990. The FTE staff years increased more than 5 fold in that same period.

PHS HIV/AIDS FUNDING & FTE HISTORY

FY	$(millions)	FTEs
1986	$234	505
1987	502	794
1988	962	1,391
1989	1,301	1,925
1990	1,586	2,561

In addition to PHS, the Health Care Financing Administration, the Social Security Administration, the Office of Human Development Services, the Departments of Defense and Veterans Affairs and State, the Agency for International Development, and other Federal agencies support HIV research, prevention, treatment, and income support activities. In total, Federal spending for HIV/AIDS is estimated to increase 18% from $2.9 billion in FY 1990 to $3.5 billion in FY 1991. The broad Federal effort complements the variety of State, local, and private initiatives to address the critical health and social problems caused by the HIV epidemic.

Over the past several years, PHS has been fighting the epidemic with an ever increasing financial commitment and dedication of its employees. With the FY 1991 request, nearly $6.5 billion will have been earmarked by PHS for HIV/AIDS research, prevention, and services efforts over the last decade. As a result of this large investment, major advances have been made against HIV/AIDS, advances that not only indicate progress, but also advances our efforts to address underlying, general health care problems as well. More scientific and public health advances have been made in a shorter period of time for HIV/AIDS than for any other complex disease in the history of medicine. Some of the major advances have been:

- Isolation and characterization of the genetic structure of HIV, understanding the ways in which HIV causes disease, and learning the epidemiology, including ways in which the virus is transmitted;
- Development and licensing of diagnostic and screening tests;
- Implementation of prevention efforts to provide people with information about how to reduce the risk of becoming infected with HIV by appropriate behavior changes;
- Development, evaluation, and approval of drug treatments that prolong the lives of many persons with HIV infection and AIDS.

The HIV/AIDS Problem - Current and Future

Through December 1989, more than 117,000 AIDS cases and more than 70,000 AIDS-related deaths in the U.S. have been reported to the Centers for Disease Control since June 1981. Over 35,000 AIDS cases were reported during calendar year 1989. Preliminary results from a workshop to review the projections for future trends of the epidemic suggest there are an estimated 600,000 to 1,400,000 HIV-infected persons in the U.S. Natural history studies suggest that most HIV-infected persons will become ill at some time after infection, even though this may not occur for 8 to 10 years or even longer. Because of this, it is expected that the number of newly diagnosed cases of AIDS will continue to increase in the U.S. at least through 1993.

HIV-infected persons potentially may transmit infection to others throughout their prolonged period of infection and illness. Education about the means of transmission of HIV is important so that everyone can take effective steps to prevent additional infections and ultimately to stop the epidemic. Although the incidence of new HIV infections has declined in some groups, it has remained at a high level among others. Persons at highest risk of HIV infection in the U.S. today include homosexual or bisexual men and intravenous drug users, although heterosexual persons who are sexual partners of infected persons (whether or not they know they are infected) are also at high risk of infection.

FY 1991 Budget Request/Initiatives

The basic tools to control the spread of HIV are in hand, but much work remains to be done. The FY 1991 President's budget of almost $1.7 billion will enable PHS to continue progress against this epidemic and continues to emphasize PHS's primary missions with respect to HIV, research and prevention.

The following presents some of the most significant items proposed for initiation, expansion or continuation in FY 1991 by functional category:

Basic Science Research: This budget requests an increase of $52 million for the biomedical, neuroscience, behavioral research, therapeutic agents, vaccines and research enhancement activities. The National Institutes of Health's (NIH) budget emphasizes: studies to examine the factors affecting the entry of HIV into macrophages, retroviral growth within the target cells, and how these relate to pulmonary complications of HIV infection; delineation of the pathogenic mechanism of HIV infection at the molecular level in order to develop new antiviral compounds useful in the treatment of AIDS; and, studies on the pathogenesis of HIV infection. The Alcohol, Drug Abuse, and Mental Health Administration's (ADAMHA) budget focuses on the effects of drug abuse on susceptibility to HIV infection, and on the immunological effects of medications used in the treatment of drug abuse.

In the neuroscience and neuropsychiatric research areas, FY 1991 initiatives will focus on identifying neurotoxins produced and released by HIV within the central nervous system, understanding the natural history of HIV infection in the nervous system, and developing effective treatments for HIV infection in the brain. The ADAMHA will pursue studies of drug treatment improvement and compliance, outreach to hardcore drug users who resist treatment, and ways to promote and sustain change of high-risk behavior.

For therapeutic agents development, the FY 1991 budget will expand the National Cooperative Drug Discovery Groups for treating opportunistic infections associated with AIDS. The budget also enhances the clinical research facilities at the existing Pediatric AIDS Clinical Trials Units (ACTU), expands the outpatient capacity in the NIH intramural program as mandated by P.L. 100-607 (Health Omnibus Programs Extension Act of 1988), and facilitates continued development of safe and effective agents for the prevention and control of HIV.

Risk Assessment and Prevention: The FY 1991 President's budget requests a $90.8 million increase to continue the broad spectrum of risk assessment activities designed to help understand how HIV spreads and to whom. Information developed by these activities provides insight into: the number of people infected with HIV; the rate of new infection; distribution and prevalence of risk behaviors and their determinants; the routes of transmission; the number of infected persons progressing to AIDS; and, the patterns of disease progression. Major risk assessment initiatives include: expanded HIV/AIDS surveillance/reporting projects and their evaluation; increased study of the patterns of drug use and HIV infection, including non-IV cocaine use; patterns of heterosexual transmission; and, the risk of occupational exposure to health care workers.

The major goal of prevention programs -- interrupting the transmission of HIV -- relies heavily on information and education efforts that motivate people to adopt and sustain behaviors which do not put themselves or others at risk for infection. Major prevention initiatives include programs that focus on: expanded counseling, testing, and partner notification programs and their evaluation; programs targeting high-risk, out-of-school youth (homeless, runaway, etc.); increased education and training center initiatives to further train health professionals; preventing perinatal infection; and, meeting increased demands on the National AIDS Information Clearinghouse, National Hotline, and AIDS Clinical Trials Hotline.

Product Evaluation, Research, and Monitoring: An increase of $7.0 million over the FY 1990 appropriation is requested to support regulatory activities for therapeutics, vaccines, diagnostics, blood and blood products and medical devices related to HIV infection and AIDS. The increase will be used to: develop computerized application and tracking systems; increase the number of drug reviewers; fund extramural studies that support post-marketing surveillance; and, provide for research and review of new vaccine applications. In addition, this increase reflects the need to sustain the number of persons performing regulatory activities in the device and blood and blood products areas, such as inspecting manufacturing facilities and blood banks, monitoring condom and examination glove quality, and reviewing applications for new diagnostic test kits for HIV or other medical devices related to HIV infection.

Clinical Health Services Research and Delivery: The FY 1991 President's Budget proposes a $44.4 million decrease in this area. States now cover some AIDS drugs through Medicaid and many private insurers cover AZT since it is now FDA-approved. These circumstances have decreased the need for emergency assistance provided in the past by the Public Health Service. This budget request increases funding to Community Health Centers (CHC) providing primary health care services to HIV-infected persons. For those using CHCs, this program will increase counseling, testing, prevention and primary care in order to provide a continuum of care to those individuals, their sexual partners, and families. The Agency for Health Care Policy and Research will support research to expand the knowledge base on access to, utilization, quality, effectiveness, costs and financing of services for the HIV-infected persons and AIDS patients.

PHS-Wide Activities: The FY 1991 President's budget requests an increase of $3.6 million over the FY 1990 appropriation. New efforts in the NIH facilities program would provide additional animal space to expand HIV/AIDS-related research. The increase would also allow for much needed repairs and improvements to space currently utilized for HIV/AIDS research programs.

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
FOOD AND DRUG ADMINISTRATION	$56,220	$63,236	$7,016
HEALTH RESOURCES AND SERVICES ADMINISTRATION	112,503	72,679	(39,824)
INDIAN HEALTH SERVICE	0	1,013	1,013
CENTERS FOR DISEASE CONTROL	442,826	509,103	66,277
NATIONAL INSTITUTES OF HEALTH	743,532	800,164	56,632
ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION	214,647	229,669	15,022
ADMINISTRATION FOR HEALTH CARE POLICY AND RESEARCH	8,474	10,505	2,031
OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH	7,676	8,523	847
PHS TOTAL	$1,585,878	$1,694,892	$109,014

PUBLIC HEALTH SERVICE
HIV/AIDS

	FY 1990	FY 1991 Pres. Budget	Change from FY 1990
HRSA......................	50	55	+5
CDC.......................	768	848	+80
NIH.......................	1,072	1,183	+111
ADAMHA....................	126	148	+22
AHCPR.....................	7	10	+3
OASH......................	32	38	+6
TOTAL, LABOR/HHS........	2,055	2,282	+227
FDA.......................	506	580	+74
TOTAL, PHS..............	2,561	2,862	+301

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

PUBLIC HEALTH SERVICE	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research	$755,200	$807,232	$52,032
II. Risk Assessment and Prevention	638,659	729,437	90,778
III. Product Evaluation, Research, and Monitoring	56,220	63,236	7,016
IV. Clinical Health Services Research & Delivery	117,368	72,952	(44,416)
V. PHS-wide Activities	18,431	22,035	3,604
PHS TOTAL	$1,585,878	$1,694,692	$109,014

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

PUBLIC HEALTH SERVICE	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research			
A. Biomedical Research	$197,956	$212,922	$14,966
B. Neuroscience & Neuropsychiatric Research	36,848	40,783	3,935
C. Behavioral Research	125,494	125,889	395
D. Therapeutic Agents	303,678	326,388	22,710
E. Vaccines	78,633	86,130	7,497
F. Research Enhancement	12,591	15,120	2,529
subtotal	755,200	807,232	52,032
II. Risk Assessment and Prevention			
A. Surveillance	100,139	110,834	10,695
B. Population-Based Res: Nat Hist, Trans, Risk Factors	177,953	197,216	19,263
C. Information & Education/Preventive Services	360,567	421,387	60,820
1. High Risk or Infected Persons (non-add)	(175,259)	(203,978)	(28,719)
2. Special Minority Initiatives (non-add)	(48,962)	(53,210)	(4,248)
3. School and College Aged Youth (non-add)	(46,285)	(53,293)	(7,008)
4. General Public & Special Programs (non-add)	(52,725)	(62,415)	(9,690)
5. Health-Care Workers & Providers (non-add)	(26,534)	(33,689)	(7,155)
6. Prevention Capacity Enhancement (non-add)	(10,802)	(14,802)	(4,000)
subtotal	638,659	729,437	90,778
III. Product Evaluation, Research, and Monitoring			
A. Therapeutic Agents	21,876	24,760	2,884
B. Vaccines	8,560	9,688	1,128
C. Diagnostic Reagents and Test Kits	9,036	10,227	1,191
D. Blood and Blood Products	8,084	9,150	1,066
E. Medical Devices	8,664	9,411	747
subtotal	56,220	63,236	7,016
IV. Clinical Health Services Research & Delivery			
A. Services	87,749	41,529	(46,220)
[Drug Subsidy Programs (non-add)	[29,606]	0	[-29,606]
B. Pediatric Demonstrations	14,803	14,735	(68)
C. Construction	4,342	4,129	(213)
D. Research	10,474	12,559	2,085
subtotal	117,368	72,952	(44,416)
V. PHS-wide Activities			
A. OASH/NAPO	3,666	3,935	269
B. Contingency Fund	0	0	0
C. Construction (PHS Facilities)	14,765	18,100	3,335
subtotal	18,431	22,035	3,604
PHS Total	$1,585,878	$1,694,892	$109,014

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

FOOD AND DRUG ADMINISTRATION	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research			
A. Biomedical Research	---	---	---
B. Neuroscience & Neuropsychiatric Research	---	---	---
C. Behavioral Research	---	---	---
D. Therapeutic Agents	---	---	---
E. Vaccines	---	---	---
F. Research Enhancement	---	---	---
subtotal	0	0	0
II. Risk Assessment and Prevention			
A. Surveillance	---	---	---
B. Population-Based Res: Nat Hist, Trans, Risk Factors	---	---	---
C. Information & Education/Preventive Services	---	---	---
1. High Risk or Infected Persons (non-add)	---	---	---
2. Special Minority Initiatives (non-add)	---	---	---
3. School and College Aged Youth (non-add)	---	---	---
4. General Public & Special Programs (non-add)	---	---	---
5. Health-Care Workers & Providers (non-add)	---	---	---
6. Prevention Capacity Enhancement (non-add)	---	---	---
subtotal	0	0	0
III. Product Evaluation, Research, and Monitoring			
A. Therapeutic Agents	21,876	24,760	2,884
B. Vaccines	8,560	9,688	1,128
C. Diagnostic Reagents and Test Kits	9,036	10,227	1,191
D. Blood and Blood Products	8,084	9,150	1,066
E. Medical Devices	8,664	9,411	747
subtotal	56,220	63,236	7,016
IV. Clinical Health Services Research & Delivery			
A. Services	---	---	---
[Drug Subsidy Programs (non-add)	---	---	---
B. Pediatric Demonstrations	---	---	---
C. Construction	---	---	---
D. Research	---	---	---
subtotal	0	0	0
V. PHS-wide Activities			
A. OASH/NAPO	---	---	---
B. Contingency Fund	---	---	---
C. Construction (PHS Facilities)	---	---	---
subtotal	0	0	0
FDA Total	$56,220	$63,236	$7,016

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

HEALTH RESOURCES AND SERVICES ADMINISTRATION	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research			
A. Biomedical Research	---	---	---
B. Neuroscience & Neuropsychiatric Research	---	---	---
C. Behavioral Research	---	---	---
D. Therapeutic Agents	---	---	---
E. Vaccines	---	---	---
F. Research Enhancement	---	---	---
subtotal	0	0	0
II. Risk Assessment and Prevention			
A. Surveillance	---	---	---
B. Population-Based Res: Nat Hist, Trans, Risk Factors	---	---	---
C. Information & Education/Preventive Services	14,549	21,000	6,451
1. High Risk or Infected Persons (non-add)	---	---	---
2. Special Minority Initiatives (non-add)	---	---	---
3. School and College Aged Youth (non-add)	---	---	---
4. General Public & Special Programs (non-add)	---	---	---
5. Health-Care Workers & Providers (non-add)	(14,549)	(21,000)	(6,451)
6. Prevention Capacity Enhancement (non-add)	---	---	---
subtotal	14,549	21,000	6,451
III. Product Evaluation, Research, and Monitoring			
A. Therapeutic Agents	---	---	---
B. Vaccines	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---
D. Blood and Blood Products	---	---	---
E. Medical Devices	---	---	---
subtotal	0	0	0
IV. Clinical Health Services Research & Delivery			
A. Services	78,809	32,815	(45,994)
[Drug Subsidy Programs (non-add)	[29,606]	---	[-29,606]
B. Pediatric Demonstrations	14,803	14,735	(68)
C. Construction	4,342	4,129	(213)
D. Research	---	---	---
subtotal	97,954	51,679	(46,275)
V. PHS-wide Activities			
A. OASH/NAPO	---	---	---
B. Contingency Fund	---	---	---
C. Construction (PHS Facilities)	---	---	---
subtotal	0	0	0
HRSA Total	$112,503	$72,679	($39,824)

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

INDIAN HEALTH SERVICE	FY 1990 Revised Cong. Action 1/	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research			
A. Biomedical Research	---	---	---
B. Neuroscience & Neuropsychiatric Research	---	---	---
C. Behavioral Research	---	---	---
D. Therapeutic Agents	---	---	---
E. Vaccines	---	---	---
F. Research Enhancement	---	---	---
subtotal	0	0	0
II. Risk Assessment and Prevention			
A. Surveillance	---	95	95
B. Population-Based Res: Nat Hist, Trans, Risk Factors.	---	---	---
C. Information & Education/Preventive Services	0	650	650
1. High Risk or Infected Persons (non-add)	---	(50)	(50)
2. Special Minority Initiatives (non-add)	---	(315)	(315)
3. School and College Aged Youth (non-add)	---	(50)	(50)
4. General Public & Special Programs (non-add)	---	(100)	(100)
5. Health-Care Workers & Providers (non-add)	---	(50)	(50)
6. Prevention Capacity Enhancement (non-add)	---	(85)	(85)
subtotal	0	745	745
III. Product Evaluation, Research, and Monitoring			
A. Therapeutic Agents	---	---	---
B. Vaccines	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---
D. Blood and Blood Products	---	---	---
E. Medical Devices	---	---	---
subtotal	0	0	0
IV. Clinical Health Services Research & Delivery			
A. Services	---	268	268
[Drug Subsidy Programs (non-add)	---	---	---
B. Pediatric Demonstrations	---	---	---
C. Construction	---	---	---
D. Research	---	---	---
subtotal	0	268	268
V. PHS-wide Activities			
A. OASH/NAPO	---	---	---
B. Contingency Fund	---	---	---
C. Construction (PHS Facilities)	---	---	---
subtotal	0	0	0
IHS Total	$0	$1,013	$1,013

1/ Interior Approp. Committee did not provide funds for IHS under the assumption Labor/HHS would provide funds. At this time it has not been determined where the funds will be taken.

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

CENTERS FOR DISEASE CONTROL	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research			
A. Biomedical Research	$5,309	$5,522	$213
B. Neuroscience & Neuropsychiatric Research	---	---	---
C. Behavioral Research	---	---	---
D. Therapeutic Agents	---	---	---
E. Vaccines	---	---	---
F. Research Enhancement	---	---	---
subtotal	5,309	5,522	213
II. Risk Assessment and Prevention			
A. Surveillance	87,576	96,758	9,182
B. Population-Based Res: Nat Hist, Trans, Risk Factors	38,411	44,162	5,751
C. Information & Education/Preventive Services	311,530	362,661	51,131
1. High Risk or Infected Persons (non-add)	(171,608)	(200,146)	(28,538)
2. Special Minority Initiatives (non-add)	(44,952)	(48,307)	(3,355)
3. School and College Aged Youth (non-add)	(45,617)	(52,527)	(6,910)
4. General Public & Special Programs (non-add)	(38,551)	(46,964)	(8,413)
5. Health-Care Workers & Providers (non-add)	---	---	---
6. Prevention Capacity Enhancement (non-add)	(10,802)	(14,717)	(3,915)
subtotal	437,517	503,581	66,064
III. Product Evaluation, Research, and Monitoring			
A. Therapeutic Agents	---	---	---
B. Vaccines	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---
D. Blood and Blood Products	---	---	---
E. Medical Devices	---	---	---
subtotal	0	0	0
IV. Clinical Health Services Research & Delivery			
A. Services	---	---	---
[Drug Subsidy Programs (non-add)	---	---	---
B. Pediatric Demonstrations	---	---	---
C. Construction	---	---	---
D. Research	---	---	---
subtotal	0	0	0
V. PHS-wide Activities			
A. OASH/NAPO	---	---	---
B. Contingency Fund	---	---	---
C. Construction (PHS Facilities)	---	---	---
subtotal	0	0	0
CDC Total	$442,826	$509,103	$66,277

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

NATIONAL INSTITUTES OF HEALTH	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research			
A. Biomedical Research	$170,546	$180,061	$9,515
B. Neuroscience & Neuropsychiatric Research	20,324	21,669	1,345
C. Behavioral Research	4,799	5,172	373
D. Therapeutic Agents	303,678	326.388	22,710
E. Vaccines	78,633	86,130	7,497
F. Research Enhancement	8,253	9,445	1,192
subtotal	586,233	628,865	42,632
II. Risk Assessment and Prevention			
A. Surveillance	8,263	8,981	718
B. Population-Based Res: Nat Hist, Trans, Risk Factors.	117,935	128,034	10,099
C. Information & Education/Preventive Services	16,336	17,784	1,448
1. High Risk or Infected Persons (non-add)	(2,701)	(2,796)	(95)
2. Special Minority Initiatives (non-add)	---	---	---
3. School and College Aged Youth (non-add)	(668)	(716)	(48)
4. General Public & Special Programs (non-add)	(10,554)	(11,666)	(1,112)
5. Health-Care Workers & Providers (non-add)	(2,413)	(2,606)	(193)
6. Prevention Capacity Enhancement (non-add)	---	---	---
subtotal	142,534	154,799	12,265
III. Product Evaluation, Research, and Monitoring			
A. Therapeutic Agents	---	---	---
B. Vaccines	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---
D. Blood and Blood Products	---	---	---
E. Medical Devices	---	---	---
subtotal	0	0	0
IV. Clinical Health Services Research & Delivery			
A. Services	---	---	---
[Drug Subsidy Programs (non-add)	---	---	---
B. Pediatric Demonstrations	---	---	---
C. Construction	---	---	---
D. Research	---	---	---
subtotal	0	0	0
V. PHS-wide Activities			
A. OASH/NAPO	---	---	---
B. Contingency Fund	---	---	---
C. Construction (PHS Facilities)	14,765	16,500	1,735
subtotal	14,765	16,500	1,735
NIH Total	$743,532	$800,164	$56,632

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research			
A. Biomedical Research	$22,101	$27,339	$5,238
B. Neuroscience & Neuropsychiatric Research	16,524	19,114	2,590
C. Behavioral Research	120,695	120,717	22
D. Therapeutic Agents	---	---	---
E. Vaccines	---	---	---
F. Research Enhancement	4,338	5,675	1,337
subtotal	163,658	172,845	9,187
II. Risk Assessment and Prevention			
A. Surveillance	4,300	5,000	700
B. Population-Based Res: Nat Hist, Trans, Risk Factors	21,607	25,020	3,413
C. Information & Education/Preventive Services	14,142	14,704	562
1. High Risk or Infected Persons (non-add)	(930)	(986)	(56)
2. Special Minority Initiatives (non-add)	---	---	---
3. School and College Aged Youth (non-add)	---	---	---
4. General Public & Special Programs (non-add)	(3,620)	(3,685)	(65)
5. Health-Care Workers & Providers (non-add)	(9,372)	(10,033)	(661)
6. Prevention Capacity Enhancement (non-add)	---	---	---
subtotal	40,049	44,724	4,675
III. Product Evaluation, Research, and Monitoring			
A. Therapeutic Agents	---	---	---
B. Vaccines	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---
D. Blood and Blood Products	---	---	---
E. Medical Devices	---	---	---
subtotal	0	0	0
IV. Clinical Health Services Research & Delivery			
A. Services	8,940	8,446	(494)
[Drug Subsidy Programs (non-add)	---	---	---
B. Pediatric Demonstrations	---	---	---
C. Construction	---	---	---
D. Research	2,000	2,054	54
subtotal	10,940	10,500	(440)
V. PHS-wide Activities			
A. OASH/NAPO	---	---	---
B. Contingency Fund	---	---	---
C. Construction (PHS Facilities)	---	1,600	1,600
subtotal	0	1,600	1,600
ADAMHA Total	$214,647	$229,669	$15,022

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

ADMINISTRATION FOR HEALTH CARE POLICY AND RESEARCH	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research			
A. Biomedical Research	---	---	---
B. Neuroscience & Neuropsychiatric Research	---	---	---
C. Behavioral Research	---	---	---
D. Therapeutic Agents	---	---	---
E. Vaccines	---	---	---
F. Research Enhancement	---	---	---
subtotal	0	0	0
II. Risk Assessment and Prevention			
A. Surveillance	---	---	---
B. Population-Based Res: Nat Hist, Trans, Risk Factors	---	---	---
C. Information & Education/Preventive Services	---	---	---
1. High Risk or Infected Persons (non-add)	---	---	---
2. Special Minority Initiatives (non-add)	---	---	---
3. School and College Aged Youth (non-add)	---	---	---
4. General Public & Special Programs (non-add)	---	---	---
5. Health-Care Workers & Providers (non-add)	---	---	---
6. Prevention Capacity Enhancement (non-add)	---	---	---
subtotal	0	0	0
III. Product Evaluation, Research, and Monitoring			
A. Therapeutic Agents	---	---	---
B. Vaccines	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---
D. Blood and Blood Products	---	---	---
E. Medical Devices	---	---	---
subtotal	0	0	0
IV. Clinical Health Services Research & Delivery			
A. Services	---	---	---
(Drug Subsidy Programs (non-add)	---	---	---
B. Pediatric Demonstrations	---	---	---
C. Construction	---	---	---
D. Research	8,474	10,505	2,031
subtotal	8,474	10,505	2,031
V. PHS-wide Activities			
A. OASH/NAPO	---	---	---
B. Contingency Fund	---	---	---
C. Construction (PHS Facilities)	---	---	---
subtotal	0	0	0
HCPR Total	$8,474	$10,505	$2,031

PUBLIC HEALTH SERVICE
HIV/AIDS
(dollars in millions)

OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH	FY 1990 Revised Cong. Action	FY 1991 Pres. Budget	Diff FY91 Pres Bud/FY90 Rev Cong Act
I. Basic Science Research			
A. Biomedical Research	---	---	---
B. Neuroscience & Neuropsychiatric Research	---	---	---
C. Behavioral Research	---	---	---
D. Therapeutic Agents	---	---	---
E. Vaccines	---	---	---
F. Research Enhancement	---	---	---
subtotal	0	0	0
II. Risk Assessment and Prevention			
A. Surveillance	---	---	---
B. Population-Based Res: Nat Hist, Trans, Risk Factors.	---	---	---
C. Information & Education/Preventive Services	4,010	4,588	578
1. High Risk or Infected Persons (non-add)	---	---	---
2. Special Minority Initiatives (non-add)	(4,010)	(4,588)	(578)
3. School and College Aged Youth (non-add)	---	---	---
4. General Public & Special Programs (non-add)	---	---	---
5. Health-Care Workers & Providers (non-add)	---	---	---
6. Prevention Capacity Enhancement (non-add)	---	---	---
subtotal	4,010	4,588	578
III. Product Evaluation, Research, and Monitoring –			
A. Therapeutic Agents	---	---	---
B. Vaccines	---	---	---
C. Diagnostic Reagents and Test Kits	---	---	---
D. Blood and Blood Products	---	---	---
E. Medical Devices	---	---	---
subtotal	0	0	0
IV. Clinical Health Services Research & Delivery			
A. Services	---	---	---
[Drug Subsidy Programs (non-add)	---	---	---
B. Pediatric Demonstrations	---	---	---
C. Construction	---	---	---
D. Research	---	---	---
subtotal	0	0	0
V. PHS-wide Activities			
A. OASH/NAPO	3,666	3,935	269
B. Contingency Fund	---	---	---
C. Construction (PHS Facilities)	---	---	---
subtotal	3,666	3,935	269
OASH Total	$7,676	$8,523	$847

JUSTIFICATION OF THE BUDGET ESTIMATES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Agency for Health Care Policy and Research

Health Care Policy and Research

FY 1991 Budget — Page

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Agency for Health Care Policy and Research

Health Care Policy and Research

For carrying out titles III and IX of the Public Health Service Act, and Part A of title XI of the Social Security Act[1/]*, $110,239,000, to be derived to the maximum extent possible from the funds authorized by Section 926(b) of the Public Health Service Act; and of which not to exceed $28,000,000 to be transferred from the Federal Hospital Insurance and the Federal Supplementary Medical Insurance Trust Funds, as authorized by section 1142 of the Social Security Act; and of which not to exceed $1,037,000 to be transferred from the Federal Hospital Insurance and the Federal Supplementary Medical Insurance Trust Funds, as authorized by section 201(g) of the Social Security Act; and the remainder to be appropriated from general funds of the Treasury; and, in addition, amounts received from Freedom of Information Act fees, reimbursable and interagency agreements, and the sale of data tapes shall be credited to this appropriation and shall remain available until expended*[2/].

Explanation of Changes

1/ This language is being requested to provide funds in a new appropriation for the Agency for Health Care Policy and Research as authorized by the Omnibus Budget Reconciliation Act of 1989. The National Center for Health Services Research and Health Care Technology Assessment and Medical Treatment Effectiveness programs, previously funded in the Assistant Secretary for Health, have been transferred to this account.

2/ Funds that are received from Freedom of Information Act fees, reimbursable and interagency agreements, and the sale of data tapes may be credited to this appropriation and remain available until expended.

Health Care Policy and Research

Language Analysis

Language Provision	Explanation
"for carrying out Titles III and IX of the Public Health Service Act, and Part A of Title XI of the Social Security Act, $110,239,000..."	$110,239,000 is the total amount of funds requested for this account in 1991. This is an obligation amount, not budget authority, and is derived from several sources of funds.
"to be derived to the maximum extent possible from the funds authorized by 926(b) of the Public Health Service Act..."	Section 926(b) of the PHS Act makes available to the Agency for Health Care Policy and Research 40 percent of the maximum amount authorized in section 2611 (relating to evaluations) of the PHS Act. Funds available from this source will, to the maximum extent possible make up the obligational authority requested.
"the remainder to be transferred from the general funds of the Treasury".	Indefinite budget authority from the general funds of the Treasury is requested to bring the total amount available for Health Care Policy and Research to $110,239,000, after all other sources are calculated.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
AGENCY FOR HEALTH CARE POLICY AND RESEARCH
HEALTH CARE POLICY AND RESEARCH

Amounts Available for Obligation 1/

	1989 Actual	1990 Appropriation	1991 Estimate
Appropriation:			
Annual	---	---	$39,126,000
Comparative transfers from:			
Office of the Assistant Secretary for Health	$25,603,000	$22,930,000	---
Medical Treatment Effectiveness	---	26,838,000	---
Subtotal, adjusted budget authority	25,603,000	49,768,000	39,126,000
Receipts and reimbursements from:			
Medicare Trust Funds	6,916,000	6,037,000	29,037,000
Pursuant to the Health Services Amendments of 1985, P.L. 99-117, for health services research projects	6,986,000	---	---
Pursuant to P.L. 100-436, for National Medical Expenditure Survey	10,033,000	---	---
Pursuant to Section 487(d)(3)(B) PHS Act, National Research Service Awards	1,323,000	1,590,000	1,300,000
Pursuant to Section 926(b) PHS Act, health services research projects	---	41,443,000	40,776,000
Unobligated Balance, Lapse	-92,000	---	---
Total obligations	$50,769,000	$98,838,000	$110,239,000

1/ Excludes the following amounts for reimbursements: FY 1989 - $959,000; FY 1990 - $960,000; and FY 1991 - $960,000.

Detail of Program Funding Sources

Agency for Health Care Policy and Research
($000)

FY 1989 (Actual)	BA	Trust Funds	1% Evaluation Funds NMES/HSP	1% Evaluation Funds Other	NRSA	Total
Medical Treatment Effectiveness	---	$5,877	---	---	---	$5,877
Health Services Research & Technology Assessment	$16,765	1,034	$10,033	$6,986	$1,323	36,141
HIV	6,830	---	---	---	---	6,830
Program Support	1,921	---	---	---	---	1,921
Total	$25,516	$6,911	$10,033	$6,986	$1,323	$50,769

FY 1990	BA	Trust Funds	1% Evaluation Funds NMES/HSP	1% Evaluation Funds Other	NRSA	Total
Medical Treatment Effectiveness	$26,838	$5,000	---	$5,698	---	$37,536
Health Services Research & Technology Assessment	12,161	1,037	$14,681	21,064	$1,590	50,533
HIV	8,474	---	---	---	---	8,474
Program Support	2,295	---	---	---	---	2,295
Total	$49,768	$6,037	$14,681	$26,762	$1,590	$98,838

FY 1991	BA	Trust Funds	1% Evaluation Funds NMES/HSP	1% Evaluation Funds Other	NRSA	Total
Medical Treatment Effectiveness	$14,065	$28,000	---	$6,453	---	$48,518
Health Services Research & Technology Assessment	12,226	1,037	$13,776	20,547	$1,300	48,886
HIV	10,505	---	---	---	---	10,505
Program Support	2,330	---	---	---	---	2,330
Total	$39,126	$29,037	$13,776	$27,000	$1,300	$110,239

SUMMARY OF CHANGES

1990 Appropriation	$49,768,000
(Obligations)	(98,838,000)
1991 Request	39,126,000
(Obligations)	(110,239,000)
Net change	-10,642,000)
(Obligations)	(+$11,401,000)

Obligations

	1990 Current Estimate Base Pos. (FTE)	1990 Current Estimate Base Obligations	Change from Base Pos. (FTE)	Change from Base Obligations
Increases:				
A. Built-in:				$
1. FY 1991 Pay raise				+378,000
2. Within grade increases		9,114,000		+90,000
3. Annualization of 1990 pay raise		9,114,000		+67,000
4. DHHS Working Capital Fund		68,000		+11,000
5. PHS Service and Supply Fund		655,000		+65,000
6. Federal Employee Retirement System		239,000		+15,000
7. Federal Telecommunications System		192,000		+6,000
8. Rent to GSA		304,000		+12,000
9. One extra day of pay		9,114,000		+24,000
Subtotal				+668,000
B. Program:				
1. Medical Treatment Effectiveness.. For increased outcomes research, guidelines, and dissemination.	27 (27)	37,536,000	+5 (+5)	+10,879,000
2. General Health Services Research & Technology Assessment....... For 3 additional positions.	74 (99)	50,533,000	+3 (+3)	+165,000
3. HIV.... To expand the AIDS cost and utilization survey	7 (7)	8,474,000	+3 (+3)	+1,994,000
Subtotal			+11 (+11)	+13,038,000
Total increases			+11 (+11)	+13,706,000

Decreases:

A. Program:

1. General Health Services Research & Technology Assessment........ For decreased cost of NMES and absorption of built-in increases.	74 (99)	50,533,000	---	-2,213,000
2. Program Support.................. For absorption of built-in increases.	34 (34)	2,295,000	--- (---)	- 92,000
Total, decreases...............			--- (---)	-2,305,000
Net change (Obligations)........			+11 (+11)	+11,401,000

Obligations by Activity
(Obligations in thousands)

	1989 Actual		1990 Appropriation		1991 Estimate	
	FTE	Amount	FTE	Amount	FTE	Amount
1. Medical Treatment Effectiveness Program	---	$5,877	27	$37,536	32	$48,518
2. General Health Services Research & Technology Assessment	101	36,141	99	50,533	102	48,886
3. HIV	4	6,830	7	8,474	10	10,505
4. Program Support 1/	28	1,921	34	2,295	34	2,330
Total	133	50,769	167	98,838	178	110,239

1/ This reflects a comparable transfer of funds from the Assistant Secretary for Health and Medical Treatment Effectiveness programs. The Program Support activity reflects 6 FTEs and $261,000 in FY 1989 and 6 FTEs and $624,000 in FY 1990 which were formerly included in the NCHSR Program Operations activity for grants and contract management support.

Budget Authority by Activity
(Budget authority in thousands)

	1989 Actual		1990 Appropriation		1991 Estimate	
	FTE	Amount	FTE	Amount	FTE	Amount
1. Medical Treatment Effectiveness Program	---	---	27	$26,838	32	$14,065
2. General Health Services Research & Technology Assessment	101	$16,851	99	12,161	102	12,226
3. HIV	4	6,831	7	8,474	10	10,505
4. Program Support 1/	28	1,921	34	2,295	34	2,330
Total	133	25,603	167	49,768	178	39,126

1/ This reflects a comparable transfer of funds from the Assistant Secretary for Health and Medical Treatment Effectiveness programs. The Program Support activity reflects 6 FTEs and $261,000 in FY 1989 and 6 FTEs and $624,000 in FY 1990 which were formerly included in the NCHSR Program Operations activity for grants and contract management support.

Obligations by Object

	1990 Appro.	1991 Estimate	Increase or Decrease
Total number of full-time permanent positions...	142	153	+11
Total compensable workyears:			
Full-time equivalent employment.............	167	178	+11
Full-time equivalent of overtime and holiday hours............................	1	1	---
Average ES salary............................	$77,400	$92,875	+$15,475
Average GS Grade.............................	10.6	10.6	---
Average GS Salary............................	$36,862	$38,152	+$1,290
Average grade, grades established by Act of July 1, 1944 (42 U.S.C. 207)................	5.29	5.12	- 0.17
Average salary, grades established by Act of July 1, 1944 (42 U.S.C. 207)................	$38,258	$39,597	+$1,339
Average salary of ungraded positions..........	$44,758	$46,325	+$1,567
Personnel compensation:			
Full-time permanent..........................	$5,335,000	$6,261,000	+$926,000
Other than full-time permanent..............	2,070,000	2,070,000	---
Other personnel compensation................	211,000	211,000	---
Total personnel compensation.............	7,616,000	8,542,000	+926,000
Personnel benefits...........................	1,498,000	1,657,000	+159,000
Travel and transportation of persons..........	255,000	265,000	+10,000
Transportation of things......................	70,000	66,000	-4,000

Obligations by Object

	1990 Appro.	1991 Estimate	Increase or Decrease
Rent, communications, and utilities:			
Rental payments to GSA	400,000	434,000	+34,000
Communications, utilities, and miscellaneous charges	432,000	454,000	+22,000
Printing and reproduction	347,000	369,000	+22,000
Other services	7,571,000	10,047,000	+2,476,000
Project contracts	29,720,000	33,093,000	+3,373,000
Supplies and materials	273,000	274,000	+1,000
Equipment	630,000	692,000	+62,000
Grants, subsidies, and contributions	50,026,000	54,346,000	+4,320,000
Total budget authority by object	98,838,000	110,239,000	+11,401,000

Budget Authority by Object

	1990 Appro.	1991 Estimate	Increase or Decrease
Personnel compensation:			
Full-time permanent	$4,522,000	$5,244,000	+$722,000
Other than full-time permanent	1,224,000	1,224,000	---
Other personnel compensation	171,000	172,000	+1,000
Total personnel compensation	5,917,000	6,640,000	+723,000
Personnel benefits	1,195,000	1,321,000	+126,000
Travel and transportation of persons	200,000	206,000	+6,000
Transportation of things	65,000	61,000	-4,000
Rent, communications, and utilities:			
Rental payments to GSA	304,000	316,000	+12,000
Communications, utilities, and miscellaneous charges	352,000	383,000	+31,000
Printing and reproduction	345,000	365,000	+20,000
Other services	6,049,000	929,000	-5,120,000
Project contracts	6,509,000	6,625,000	+116,000
Supplies and materials	71,000	72,000	+1,000
Equipment	456,000	517,000	+61,000
Grants, subsidies, and contributions	28,305,000	21,691,000	- 6,614,000
Total budget authority by object	49,768,000	39,126,000	-10,642,000

Significant Items in House and Senate Appropriations Committee Reports

Item	
FY 1989 House Report #101-172	
Alzheimer's Disease	
1. The committee recommends that additional funds be allocated for research on the costs and cost-effectiveness of various service interventions for individuals with Alzheimer's disease and their families.	1. The Agency for Health Care Policy and Research (formerly the National Center for Health Services Research and Health Care Technology Assessment or NCHSR) will allocate additional funds for research in this area upon receipt of applications which have been reviewed for scientific and technical merit and recommended for approval by the Agency's legislatively mandated peer review groups.
National Medical Expenditure Survey	
2. The committee has identified an amount of $14,681,000 in the bill language to be transferred to this account for carrying out the National Medical Expenditure Survey and the Hospital Studies Program. The funds are transferred from funds available under the Public Health Service one-percent evaluation setaside. These are in addition to funds appropriated directly to the National Center for this purpose.	2. In FY 1990, $14,681,000 from funds available under the Public Health Service one-percent evaluation set aside has been transferred to the Agency for Health Care Policy and Research (AHCPR) for the National Medical Expenditure Survey and the Hospital Studies Program. This level of funding was identified in the appropriation language contained in P.L. 101-166.
Medical Treatment Effectiveness	
3. The committee is pleased that the Department of Health and Human Services has put forth a plan to substantially expand efforts in the area of medical treatment effectiveness...This initiative represents an	3. In FY 1990-FY 1991, the Department will expand the original medical effectiveness initiative into a more formalized Medical Treatment Effectiveness Program within the AHCPR. The increased visibility of outcomes findings and

FY 1989 House Report #101-172

approach to the establishment of a scientific foundation for assuring that information on clinical effectiveness is developed and shared and that the best medical practices are used to treat and care for our citizens.	effectiveness research, and professional assimilation of the related research, reflects the Department's belief that years of careful scientific studies in this area have produced strong and credible results. Outcomes research motivates us to ask what difference medical care makes with respect to health outcomes. The documentation of scientific findings by health services research about this difference, and active dissemination of these findings, will help to inform medical decisionmaking and lead to a more effective and efficient health care system.
4. While mortality and morbidity information is important and basic to the effectiveness research initiative, the Committee believes that in measuring outcomes the Department must also take into account the impact a treatment has on the patient's quality of life. It is also extremely important that the Department ensure that effectiveness research reflect, on an ongoing basis, new information and new treatments in order to remain consistent with innovation and scientific advance.	4. The Department agrees with the Committee on the need to consider the impact of a treatment on the patient's quality of life in measuring outcomes. The long term goal of the AHCPR's Medical Treatment Effectiveness Program (MEDTEP) is to change the assessment of health care services, research and financing from a focus on process, to a focus on outcomes, including the patient's health status and quality of life. The Department will ensure that activities under all four components of the MEDTEP (i.e., research on patient outcomes and clinical effectiveness, collection and development of data, dissemination and assimilation of findings, and development of practice guidelines) reflect, on an ongoing basis, new information on health care services and procedures. To help in these efforts, the AHCPR will continue to work closely with the agencies of the Public Health Service, the Health Care

	Financing Administration, other Federal departments, professional organizations, specialty organizations, scientific bodies, academic medical centers, standard setting organizations, quality measurement organizations, and research based organizations.

1990 Senate Report #101-127

Rural Health Research

1. The committee is pleased with the efforts of the NCHSR to develop the capacity of education institutions located near rural areas to conduct rural health research, and urges the NCHSR to continue to support research at rural institutions. The committee is pleased with the current efforts of NCHSR to encourage investigator-initiated research proposals from researchers with strong ties to rural communities and the technical support it has provided to the five rural health research centers funded through the Office of Rural Health Policy. The committee encourages NCHSR to continue... to provide technical assistance to rural researchers and institutions to improve their capacity to develop and refine scientifically sound research proposals. The committee further urges the NCHSR to coordinate its rural health research with rural research conducted under the auspices of the Office of Rural Health Policy.	1. Rural health care will continue to be an area of special emphasis for the AHCPR. In creating the new Agency, the Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239) specifically requires that AHCPR undertake and support research, demonstration projects, and evaluations with respect to the delivery of health care services in rural areas, including frontier areas. In FY 1990, the AHCPR will continue to fund the research projects being conducted at rural institutions that were previously funded under the NCHSR authority and will support several new projects as well. Also in FY 1990, AHCPR will sponsor several technical assistance workshops for rural health researchers and rural institutions to improve their capacity to develop scientifically sound research proposals. These workshops, as with all rural health research activities and projects supported by AHCPR, will continue to be coordinated with the Office of Rural Health Policy in the Health Resources and Services Administration (HRSA).

1990 Senate Report #101-127

Medical Treatment Effectiveness

2. The committee anticipates that action may be taken by authorizing committees to establish a new agency to coordinate medical effectiveness and patient outcomes research activities, and which will also authorize the appropriate funds to carry out this mission. The committee expects to receive a detailed request for medical effectiveness research activities in fiscal year 1990.

2. Title VI (Section 6103) of the Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239) establishes a new Public Health Service (PHS) agency entitled the Agency for Health Care Policy and Research (AHCPR). As authorized under a new Title IX of the PHS Act, the purpose of the agency is to enhance the quality, appropriateness, and effectiveness of health care services and to improve access to such services. This goal will be accomplished through the promotion of improvements in clinical practice and in the organization, financing, and delivery of health care services. In carrying out the requirements of Title IX, the new Agency will be responsible for coordinating medical effectiveness and patient outcomes research, data development, information dissemination, and practice guidelines development activities. Following Conference action on the initial FY 1990 Labor/HHS appropriations bill, staff to the Chairman of the Senate Subcommittee on Labor/HHS/Education Appropriations asked the Department to submit a detailed plan for medical effectiveness research activities in fiscal year 1990. This plan was submitted to the Senate Subcommittee by the Office of the Assistant Secretary for Management and Budget in October 1989. In addition, AHCPR is proceeding with the advice contained in the Senate Report to hold a conference to develop a research agenda for medical effectiveness and outcomes research.

1990 Senate Report #101-127	
3. The committee is concerned that effectiveness studies conducted by the NCHSR, the HCFA, and other divisions of the Public Health Service must be coordinated through the NCHSR in order to avoid duplicative or wasteful spending. NCHSR should work with other divisions of the PHS, especially NIH and CDC, to analyze and evaluate the outcomes of medical care, including the effects of biomedical and clinical research in patient outcomes and the effects of preventive mechanisms. The committee also encourages NCHSR to include mental health treatments in effective studies.	3. As required by the Omnibus Budget Reconciliation Act of 1989 (P.L. 101-239), the AHCPR will coordinate its outcomes research, data development, dissemination and assimilation of findings, and practice guideline development activities under MEDTEP with those of the Health Care Financing Administration and the other agencies of the Public Health Service. All agencies of the PHS, including the National Institutes of Health, the Centers for Disease Control, the Health Resources and Services Administration, the Food and Drug Administration, the Alcohol, Drug Abuse, and Mental Health Administration and the Indian Health Service will participate in the development, implementation, and review of the Medical Treatment Effectiveness Program. For example, the Agency is discussing potential research efforts on the effectiveness of various mental health treatments with the Alcohol, Drug Abuse, and Mental Health Administration.
4. The committee expects that nonphysician health care providers will be included in medical effectiveness studies and urges NCHSR to collaborate with the National Center for Nursing Research on this effort. This is especially important to rural areas of our Nation... In conducting its effectiveness initiative, the Department should take into account the impact treatments will have on improving a patient's quality of life. Mortality and morbidity information, which important, do not present the full impact	4. Nonphysician health providers, such as nurses and dentists, will be included in effectiveness studies. The Agency is collaborating with the National Center for Nursing Research on this effort. The Department agrees with the Committee on the need to consider the impact of a treatment on the patient's quality of life in measuring outcomes. The long term goal of the AHCPR's Medical Treatment Effectiveness Program (MEDTEP) is to change the assessment of health care services, research and financing from a focus on

of a treatment on patient care and patient's functional status. The committee also encourages inclusion of outcomes research on treatments that reflect innovation and scientific advances in medical practice, such as positron emission tomography.

process to a focus on outcomes, including the patient's health status and quality of life.

The specific purpose of the MEDTEP is to improve the effectiveness and appropriateness of health care services by enhancing our understanding as to what health care practices are most effective - what works best. Research on patient outcomes and clinical effectiveness conducted under this program will assess alternative treatments or procedures through studies such as small area analysis and multidisciplinary epidemiological research. Assessments of specific technological advancements in medical practice, such as positron emission tomography, are supported through the technology assessment program of the Agency, not as part of MEDTEP. In creating AHCPR, OBRA 1989 required that the Agency conduct and support (separate and apart from research on outcomes of health care services and procedures) research on the assessment of specific health care technologies. In conducting these assessments, the Agency is to consider (among other issues) the safety, efficacy, and effectiveness of the technology in question.

Authorizing Legislation

	1990 Amount Authorized	1990 Appro-priation	1991 Amount Authorized	1991 Appro-priation
1. Medical Treatment Effectiveness Program: Title IX of the Public Health Service Act (PHSA), and Part A of Title XI of the Social Security Act (SSA) Section 1142(i).	$50,000,000	$26,838,000	$75,000,000	$14,065,000
2. General Health Services Research and Technology Assessment: Title IX and Section 301 PHSA, Section 926(a)................	$35,000,0001/	12,161,000	50,000,0002/	12,226,000
3. Human Immunodeficiency Virus: Title IX and Section 301 PHSA, Section 926(a)................	1/	8,474,000	2/	10,505,000
4. Program Support: Section 301 PHSA.....	Indefinite	2,295,000	Indefinite	2,330,000
5. Appropriation Transfer: 201(g) SSA 3/........	Indefinite	(1,037,000)	Indefinite	(1,037,000)
6. Evaluation Funds: Section 926(b) PHSA 4/..................	Indefinite	(41,443,000)	Indefinite	(40,776,000)
7. National Research Service Awards: 487(d)(3)(B) PHSA 5/.	Indefinite	(1,590,000)	Indefinite	(1,300,000)
Total appropriation....		49,768,000		39,126,000
Total appropriation against definite authorizations.......	85,000,000	47,473,000	125,000,000	36,796,000

1/This authorization of $35,000,000 is also the authority cited for the HIV activity. The total requested against this authorization is $20,635,000.

2/This authorization of $50,000,000 is also the authority cited for the HIV activity. The total requested against this authorization is $22,731,000.

3/Appropriation transfer is from the Federal Hospital Insurance and the Federal Supplementary Medical Insurance Trust Funds as authorized by Section 201 (g) of the Social Security Act for Health Care Technology Assessment and cost containment activities.

4/Section 926(b) PHSA makes available to AHCPR an amount equal to 40 percent of the maximum amount authorized in Section 2611 of the PHSA.

5/Section 487(d)(3)(B) PHSA makes one half of one percent appropriated for NRSA available to AHCPR.

Justification

Health Care Policy and Research

(Dollars in thousands)

	1990 Appropriation		1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
1. Medical Treatment Effectiveness Program	27	$26,838	32	$14,065	+5	-$12,773
(Obligations)		($37,536)		($48,518)		(+$10,982)
2. General Health Services Research & Technology Assessment	99	12,161	102	12,226	+3	+65
(Obligations)		(50,533)		(48,886)		(-1,647)
3. Human Immunodeficiency Virus	7	8,474	10	10,505	+3	+2,031
(Obligations)		(8,474)		(10,505)		(+2,031)
4. Program Support	34	2,295	34	2,330	--	+35
(Obligations)	—	(2,295)	—	(2,330)	—	(+35)
Total, budget authority	167	$49,768	178	$39,126	+11	-$10,642
Total, obligations		($98,838)		($110,239)		(+$11,401)

General Statement

The Agency for Health Care Policy and Research (AHCPR), was established by the Omnibus Budget Reconciliation Act of 1989, Public Law 101-239. The purpose of the Agency is to enhance the quality, appropriateness, and effectiveness of health care services and to improve access to services by establishing a broad base of scientific research and by promoting improvements in clinical practice and in the organization, financing, and delivery of health care services.

AHCPR succeeds the National Center for Health Services Research and Health Care Technology Assessment as the primary source of Federal support for research on medical treatment effectiveness, general health services, and health care technology. The AHCPR budget is presented in five activities: (1) Medical Treatment Effectiveness Program; (2) General Health Services Research and Technology Assessment; (3) Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV) health services research; (4) Dissemination; and (5) Program Support.

The Medical Treatment Effectiveness Program (MEDTEP) of AHCPR has significance for saving, extending, and improving the quality of lives; improving the quality of health care for Medicare beneficiaries and other patients; increasing and maintaining patients' functional abilities; and conserving resources. These benefits can occur as a result of new investment in the development and dissemination of scientific knowledge about patient outcomes, allowing health care providers and their patients to make more informed decisions about treatment options.

Health services research in this country and elsewhere indicates that variations in the use of health care services and procedures reflect the complex interaction of clinical, social, environmental, economic, and psychological factors that shape the relationship between patients and providers. Variations are appropriate if they result from differences in the needs and choices of individual patients, and if alternative patterns of care are equally effective and efficient. However, variations that result either from inadequate information about effectiveness of treatments or from differences in the "practice styles" of physicians and other providers may be inappropriate. Health services research provides evidence that inappropriate treatment decisions are reduced when pertinent information about practice patterns and patient outcomes is available. For example, providing physicians non-threatening, educational outreach or feedback has been found to decrease excessive rates of surgery and to reduce inappropriate drug prescribing. Providing patients objective information about the outcomes of alternative treatments (e.g., for prostatic hypertrophy) leads to treatment choices that better reflect patients' values. Additional research on patient outcomes and the dissemination of its findings will help to reduce the uncertainty and controversy that underlie practice variations.

Under the aegis of the AHCPR, MEDTEP includes the complementary activities and unique contributions of other agencies of the Public Health Service and the Health Care Financing Administration.

MEDTEP involves four sets of activities: 1) health services research on outcomes, effectiveness, and appropriateness of health care services and procedures; 2) database development; 3) dissemination of research findings; and 4) guidelines development.

During the 1980's, this country has undergone far-reaching changes in the structure of its health care delivery system and of private health insurance, in the scope and outreach of its Federal health care programs, and in its demographic composition. In view of these transformations, support of a research capability to increase and refine our knowledge base is essential for determining future policy.

Therefore, the acquisition of new knowledge through health services research is critical to understanding the dynamics of:

- the quality of health care and the patient outcomes resultant from that care,
- the utilization of health care services,
- health care costs and alternatives for cost-effective health care.

AHCPR will continue to support and conduct research on specific assessment and the effects of health care technologies.

AHCPR also supports research on the delivery of cost-effective health care services and improved quality of care for persons with HIV-related illnesses. Medicaid currently covers an estimated 40 percent of AIDS patients and 25 percent of all health care costs for AIDS. AHCPR research will provide information to policymakers and health care providers on the most efficient and equitable way to deliver high quality care. Comparative analyses will provide data on the total costs of treatment for HIV illnesses, financing of care, and the distribution of the related financial burden. Health services research on AIDS and HIV-related illnesses will help to develop measures of functional status. These measures will help to determine: the relationship between the course of the disease and how patients are able (or unable) to function during that time and what services are required at what point in the disease. These determinations will be the basis for better projections of the total costs of treating HIV/AIDS patients.

The FY 1991 budget request of $110,239,000 in obligations is comprised of:

Budget Authority	$39,126,000
Transfers from the Medicare Trust Funds	29,037,000
Evaluation Funds	40,776,000
National Research Service Awards	1,300,000

The budget request includes an increase in MEDTEP of $11 million for a total of $48.5 million and an increase in HIV health services research of $2 million for a total of $10.5 million. The budget continues funding at approximately the FY 1990 level for general health services research and technology assessment. The National Medical Expenditure Survey will be funded at $10.3 million in FY 1991. Finally, $1.3 million will be provided, pursuant to section 487(d)(3)(B) of the PHS Act, for National Research Service Awards.

PROGRAM ACCOMPLISHMENTS

Research supported by the Agency for Health Care Policy and Research (AHCPR) and its predecessor, the National Center for Health Services Research and Health Care Technology Assessment (NCHSR), has had a major effect on our health care system and on Federal policies. Much of today's health care system is structured and operates as a result of knowledge obtained from research sponsored by AHCPR/NCHSR.

MEDICAL TREATMENT EFFECTIVENESS PROGRAM

In FY 1988, AHCPR/NCHSR initiated the first stage of the Medical Effectiveness Treatment Program (MEDTEP). An extramural research program on the impact of medical practices on patient outcome was established. This program built on nearly two decades of NCHSR support for patient outcomes research.

Recent examples of NCHSR-supported outcomes research include:

- o Analysis of Medicare population-based rates for 153 diagnostic and surgical procedures in 13 regions revealed large variations. Over half of the procedures, including coronary artery bypass surgery, showed a more than three-fold variation among regions. A few procedures, including hernia repair and appendectomy, showed relatively little variation (Chaśsin, et al., The New England Journal of Medicine, January 30, 1986).

- o A comparison of surgery and hospitalization rates in Boston and New Haven indicated that a resident of New Haven was about twice as likely to undergo coronary artery bypass surgery as a resident of Boston. The rates of knee and hip replacements were higher in Boston while substantially higher rates of hysterectomy and back surgery were found in New Haven. Per capita medical care costs were 50 percent lower in New Haven. (Wennberg, et al., The Lancet, May 23, 1987).

- o Prostatectomy and its alternative, "watchful waiting," for the treatment of prostatic hypertrophy, were assessed under the sponsorship of the Maine Medical Association. This assessment determined that the frequently performed surgical procedure was neither as beneficial nor safe as generally thought. Only slightly more than half of the surgical patients experienced a fully satisfactory result. The study recommended that patients be more fully informed of the benefits and risks and that patient preferences should dominate the decision regarding prostatectomy versus waiting (Wennberg, et al., Journal of the American Medical Association, May 27, 1988).

- o An international analysis of mortality and reoperation after open and transurethral prostatectomy (TURP) for benign prostatic hyperplasia found that TURP was less effective in overcoming urinary obstruction than the open operation. TURP may also result in increased long-term risk of death. A randomized clinical trial was recommended for further examination of the treatment options (Roos, et al., The New England Journal of Medicine, April 27, 1989).

o A review of the literature indicates that low back pain, which is a very common complaint, generally resolves spontaneously with little intervention. Many of the diagnostic procedures which have come into use are of low yield, costly, and occasionally even harmful when they generate further tests and surgical procedures. The high rate of degenerative changes seen in asymptomatic individuals detracts from the utility of these findings in the diagnosis of low back pain (Deyo, et al., Annals of Internal Medicine, 1989).

FY 1989 marked a significant expansion in the AHCPR/NCHSR program to develop reliable and comprehensive data on medical effectiveness. The Omnibus Reconciliation Act of 1986 and the Technical and Miscellaneous Revenue Act of 1988 (which transferred monies from the Medicare Trust Fund) authorized the Patient Outcome Assessment Research Program (POARP). In 1989, four POARP teams were funded to develop and test methods to reduce inappropriate variations in the treatment of low back pain, heart attacks, cataracts, and prostate gland enlargement. Each of the funded POARP teams combines the expertise and perspectives of both community and academic physicians, to identify and analyze the outcomes of alternative practice patterns related to a significant, common medical condition. They will assess the relative effects of alternative treatments on patient survival, quality of life, cost of care, and other factors.

Grant awards were made in FY 1989 to the following projects, each of which is expected to require about 5 years to complete:

-- Richard Deyo, M.D., University of Washington, Seattle, will assess nonsurgical interventions for low back pain and different types of lumbar spine surgery for back problems, especially for spinal stenosis, the leading cause of back pain hospitalization among the elderly. Although not life-threatening, low back pain sends more Americans to see the doctor than almost any other disorder. Approximately 80 percent of all adults suffer from low back pain at some point in their life.

-- Barbara J. McNeil, M.D., Harvard Medical School, Boston, MA, will establish a national database on patient outcomes from the use of alternative treatments for myocardial infarction, which strikes more than 250,000 Medicare beneficiaries every year, with a cumulative mortality rate of 40 percent.

-- Earl P. Steinberg, M.D., Johns Hopkins University, Baltimore, MD, will assess three different procedures for the treatment of cataracts. Over one million cataract operations are performed on Medicare beneficiaries annually, making it the most common surgical procedure among persons over 65.

-- John E. Wennberg, M.D., Dartmouth Medical School, Hanover, NH, will assess transurethral resection, open prostate surgery, and nonsurgical interventions for enlargement of the prostate gland, as well as radical surgery and other therapies for localized cancer of the prostate. Enlargement of the prostate affects 8 out of every 10 men by the time they reach 80 years of age.

In addition, grants were awarded in FY 1989 to seven additional patient outcome assessment teams to assist them in planning evaluations of the management of peripheral vascular disease, cerebral vascular disease, hip disease, colon cancer, gall bladder disease, and coronary artery disease.

GENERAL EXTRAMURAL RESEARCH

As noted above, investigator-initiated, peer reviewed general health services research projects by AHCPR/NCHSR has had a major effect on our health care system and on Federal health policies. For example, the acceptance of physician assistants and nurse practitioners derived from NCHSR research, as did the development of the national emergency medical services system. With NCHSR support, computerized medical information systems designed to monitor and assist diagnostic and therapeutic decisionmaking (e.g., HELP, PROMIS, COSTAR, MINERVA, APACHE, MENTOR, and MEDIPHOR) have been developed, demonstrated, and evaluated. They are proven valuable tools in today's health care delivery system. Some of the major health status measures and severity indexes (e.g., Activities of Daily Living (ADL), Trauma Score, the Sickness Impact Profile (SIP), were developed with NCHSR support.

RURAL HEALTH

In 1987 the NCHSR sponsored a conference in San Diego, California on Rural Health Services Research Agenda at which recommendations were formulated for needed research. The recommendations address six issues of major concern to Federal, State, and local policymakers: the rural hospital; alternative delivery systems and managed care; the poor and uninsured; maternal, child, and adolescent health care; the rural elderly; and primary health services. The recommendations for rural hospitals studies call for research on questions involving economic viability, the impact of Medicare's prospective payment system, hospital costs, quality of care, and diversification of services. Suggested research topics on alternative delivery systems and managed care include costs and utilization, quality of care, and questions specific to Medicare and Medicaid patients. Studies of the rural poor and uninsured would examine uncompensated care, private health insurance and Medicaid coverage, health status, and access to care. Other portions of the agenda call for research aimed at building a basic database about the health status and utilization patterns of rural children and elderly and to conduct small area analyses to provide information about the health problems of those groups. Needed research on primary care--including emergency medical services--would examine the impact of diminished Federal support along with the effects of the rural economic recession and the relationship between health status and access to primary care.

In 1989 the NCHSR User Liaison Program conducted its third 3 1/2 day workshop for state officials dealing with rural health care issues. Participants included senior State officials from New Hampshire, South Carolina, Pennsylvania, Michigan, Iowa, West Virginia, Georgia, Tennessee, Maine and Vermont.

TECHNOLOGY ASSESSMENT

A number of ongoing or recently completed technology assessment grants have produced significant results. A study directed by Professor Jonathan Showstack showed that use of the immunosuppressive drug cyclosporine was associated with significantly lower in-hospital service use for cadaver donor kidney transplant patients at the University of California, San Francisco. The use of cyclosporine for cadaver donor patients resulted in a significantly shorter postoperative length of stay (26.4 days vs 37.0 days), a 28 percent reduction in adjusted mean charges for room and board ($12,221 vs $16,910), and a 27 percent reduction in mean adjusted charges for ancillary services ($13,243 vs $18,247). No significant differences were found in length of stay or charges associated with the use of cyclosporine in living-related donor patients (Showstack, et. al., New England Journal of Medicine, October 19, 1989).

Dr. Fredrick Mosteller and his colleagues of Harvard University have completed a meta-analysis of empirical long-term antiarrhythmic therapy after myocardial infarction (MI). Ten studies were identified for the meta-analysis which included 4,122 patients randomized to antiarrhythmic therapy or placebo. The results suggest that patients without arrhythmias or patients without premature ventricular contractions or brief and nonsustained ventricular tachycardia should not empirically receive type I agents in an attempt to prevent sudden death after MI. The researchers conclude that treating unselected patients who are at moderate risk for late sudden death after MI with currently available antiarrhythmic agents is presently unwarranted because such treatment provides no survival advantage and could be lethal (Hine, et. al., Journal of the American Medical Association, December 1, 1989).

Dr. Reed Gardner and his colleagues at Latter Day Saints Hospital in Salt Lake City implemented and evaluated a computerized infectious disease monitoring system. The system provides feedback to physicians by prompting them to give prophylactic antibiotics in a timely fashion when required before surgeries, reminding when to discontinue antibiotics that are no longer needed, and advising when the most appropriate antibiotic is not being given. The monitoring system has been accepted by medical staff, has modified its behavior, has resulted in improved quality of care, and is efficient and cost-effective.

Dr. Wayne Ray of Vanderbilt University directed research which demonstrated that Medicaid databases, with appropriate processing and augmentation, can be used successfully for monitoring of drug safety and other health services research requiring epidemiologic techniques. However, there are usually gaps in data that need to be resolved through linkages with other data sources. Access to medical records is usually required for epidemiologic studies. Medicaid data are most useful in the study of acute disease and are of less value when looking for adverse effects of long latency (Ray, American Journal of Epidemiology, April 1989). Specific drug studies using Medicaid data showed: (1) an association between non-aspirin nonsteroidal anti-inflammatory drug use and serious peptic ulcer disease in the elderly (Annals of Internal Medicine, September 1, 1988); (2) an association between psychotropic drug use and the risk of sudden infant death syndrome (SIDS) after immunization with the diphtheria-tetanus-pertussis (DTP) vaccine (New England Journal of Medicine, September 8, 1988).

ACQUIRED IMMUNE DEFICIENCY SYNDROME (AIDS)/HUMAN IMMUNODEFICIENCY VIRUS (HIV)

Health services research projects on HIV/AIDS illness are beginning to provide information from many States, different regions of the country, and from areas with high and low AIDS prevalence. They will provide information about persons in all high risk groups and socioeconomic circumstances, about the full spectrum of HIV illness (i.e., from asymptomatic to overt AIDS), and about a wide range of inpatient and outpatient settings. The portfolio includes both large and small projects, some of which provide in-depth information pertinent to one priority area and some of which address several priority areas.

INTRAMURAL RESEARCH

The Intramural research program facilitates health policy development through analysis of large data sets on expenditures and utilization of health care services. In recent years these data sets have been updated and expanded. They now represent a unique and important resource for policy studies. The Agency manages and uses these data, through its Intramural Research Program, to conduct studies in personal health care use, cost, and financing; hospital costs and utilization; and long term care costs and financing.

The National Medical Expenditure Survey (NMES) provides the Federal Government with current information on how Americans use, pay for, and finance personal health care services. The 1987 NMES obtained data from a national probability sample of the civilian population. The NMES sample involved 14,200 households and 34,459 persons. Groups of special policy interest to the Federal Government (blacks, Hispanics, the poor, the elderly, and the functionally impaired) were oversampled. The fact that households were interviewed four times during the year makes the data useful for longitudinal studies. A separate sample of American Indians and Alaska Natives provides comparative data on a population which receives major health benefits from the Federal Government.

The Hospital Studies Program was established to understand patterns of hospital use and cost, and to analyze hospital behavior in response to changes in Federal policies and in the structure of the industry. The various research studies undertaken by the Hospital Studies Program are conducted primarily through the Hospital Cost and Utilization Project (HCUP) and the State Hospital Data Project (SHDP). Both projects are dependent on large data bases that have been developed over the past decade to facilitate hospital-related policy research.

Because of their size, these data sets provide the means to study even rare medical events. Further, both data sets are being employed to study patients hospitalized for AIDS. For example, the relatively large number of AIDS cases included in the New York State data has provided information used to stage hospitalized AIDS patients by severity of illness. Such staging is essential to studies that compare different therapeutic approaches to treating these patients or to compare costs of treatment across different hospitals. These data also have been used to examine the financing of care for this costly illness.

DISSERTATION GRANTS

The doctoral dissertation grants program has continued at AHCPR and its predecessor, NCHSR, for approximately ten years. The AHCPR receives between 25 and 30 dissertation research proposals each year, and funds between ten and 20 of the most meritorious of them following a rigorous scientific review. The breadth of dissertation research topics tends to mirror the AHCPR extramural program for large-scale projects. In general, the dissertation program serves to provide support for research projects that are meritorious in their own right. Dissertation applicants and grantees have gone on to advanced work in the health services research field, have joined the NCHSR intramural research program, and have been appointed to PHS scientific advisory committees.

Medical Treatment Effectiveness Program

Authorizing Legislation - Title III and Title IX of the Public Health Service Act and Section 1142 of the Social Security Act

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Budget Authority	27	$26,838,000	32	$14,065,000	+5	-$12,773,000
(Obligations)		(37,536,000)		(48,518,000)		(+10,982,000)

1991 Authorization........................ $75,000,000

Purpose and Method of Operations

The purpose of the Medical Treatment Effectiveness Program (MEDTEP) is to improve the effectiveness and appropriateness of health care services and procedures through better understanding of the effects of health care practices on patient outcomes. The central questions of this program are:

- What treatments work best?
- Has the patient's functional status improved?

Evidence shows that health care practitioners will change their practice patterns to reflect the best clinical knowledge available. Further, it is in the general public interest to direct health care resources toward those health care practices known to be effective.

On September 7, 1989, Secretary Sullivan emphasized the importance of MEDTEP:

> "The time has come for a thorough, nationwide review of what works and what doesn't to determine which medical treatments produce the best outcomes for patients with specific health conditions. In this way, we can not only help physicians deliver the best care, but at the same time we can reduce unnecessary or ineffective treatment."

Under the aegis of AHCPR the MEDTEP will involve formal collaboration with other agencies of the Public Health Service (PHS) and the Health Care Financing Administration (HCFA). The MEDTEP will build on work already funded, linking Federal research, data, and educational resources with those of professional and research communities.

AHCPR will give priority to the following areas:

- awards of grants and contracts to evaluate the outcomes, effectiveness, and appropriateness of current strategies of prevention, diagnosis, treatment, and clinical management of health conditions, including the appropriate use of prescription drugs;

- synthesis of findings;

- development of methodologies to support outcomes research, including measurement of patients' clinical and functional status;
- development and supplementation of databases to support outcomes research, including the use of claims data and clinical data;
- enter into contracts/cooperative agreements with public and private nonprofit organizations to develop, periodically review, and update the guidelines, standards, performance measures, and review criteria;
- participation in dissemination of research findings in a timely and effective manner; and
- evaluation of the impact of research findings on medical practices

The systematic and scientific results of the outcomes research program will be available for vigorous and innovative dissemination to professional and lay audiences, to providers and patients, to employers, insurers, and policymakers. Each step will require the cooperation and feedback of all parties, public and private, researchers and practitioners, clinicians and consumers.

MEDTEP will be implemented through three sets of activities: Outcomes Reserach and Data Development; Guidelines; and Dissemination.

Program Level
(Obligations)

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	Amount	FTE	Amount	FTE	Amount
Outcomes Research and Data Development	19	$34,697,000	24	$43,169,000	5	+$8,472,000
Guidelines	8	1,839,000	8	2,649,000	---	+810,000
Dissemination	---	1,000,000	---	2,700,000	---	+1,700,000
Total, MEDTEP	27	37,536,000	32	48,518,000	+5	+10,982,000

Program Elements

Outcomes Research and Data Development

The outcomes research and data development component of MEDTEP will provide several coordinated approaches required to improve the scientific basis of medical decisionmaking. AHCPR will have responsibility for the following research activities specified in P.L. 101-239:

- to conduct and support health services research on the outcomes, effectiveness, and appropriateness of health care services and procedures used in the prevention, diagnosis, treatment, and clinical management of diseases, disorders, and other health conditions. The priorities for research will reflect the needs of the Medicare program and the requirements of the current and future development of practice guidelines. Other factors to be considered include the number of individuals to be benefited, the extent of uncertainty with respect to the use of a procedure or related outcome, the level of health expenditure, and the availability of data;
- to conduct and support evaluations of the comparative effects, on health and functional capacity, of alternative services and procedures used in prevention, diagnosis, treatment, and clinical management;
- to conduct and support health services research on the improvement of methodologies and criteria used in outcomes research;
- to conduct and support reviews and evaluations of existing research findings with respect to treatment and health conditions;
- to conduct and support reviews, evaluations, and development of methodologies that use large databases in outcomes research, including methodologies that measure clinical and functional status of patients;
- to provide grants and contracts to research centers, and contracts to other entities, to conduct outcomes research, including research on the appropriate use of prescription drugs; and
- to conduct and support evaluations of the effect of research activities on the practices of physicians in providing medical treatment, the delivery of health care, and the outcomes of health care services and procedures.

The AHCPR will collaborate with the HCFA on the following two research activities:

- to conduct and support health services research and demonstrations on the use of claims data and data on clinical and functional status in determining the outcomes, effectiveness, and appropriateness of treatment; and
- to conduct and support supplementation of existing data bases and the design of new data bases that would be used in outcomes and effectiveness research.

Guidelines

The guidelines program will be administered by the Office of the Forum for Quality and Effectiveness in Health Care, as established by Title IX, Part B, Section 911 of the PHS Act. This is the Federal focus for facilitating the transformation of clinical research findings into medical practice guidelines. The purpose is to promote the quality, appropriateness, and effectiveness of health care by arranging for the development and periodic review and updating of:

(1) clinically relevant guidelines that may be used by physicians, educators, and health care practitioners to assist in determining how diseases, disorders, and other health conditions can most effectively and appropriately be prevented, diagnosed, treated, and managed clinically; and

(2) standards of quality, performance measures, and medical review criteria through which health care providers and other appropriate entities may assess or review the provision of health care and assure the quality of such care.

Dissemination

As patient outcomes research is completed, results will be widely disseminated through journal publications, information networks and conferences sponsored by AHCPR. The resources and expertise of the National Library of Medicine and the Health Resources and Services Administration (HRSA) will be utilized to convey appropriate information to practitioners and training institutions. Research will be supported to demonstrate the effectiveness of dissemination efforts as well as to develop innovative and effective programs to translate research findings into educational curricula for physicians.

Participants and Activities

MEDTEP involves a multifaceted approach to address complex issues of health care delivery. Outcomes research will include short- and long-term analyses, retrospective and prospective studies, multiple methodologies, database development, and program evaluation to address various aspects of medical practice. Research initiatives will incorporate the complementary efforts and unique strengths of the AHCPR, other agencies of the PHS, and HCFA.

Highlights of activities will include the following:

- A long-term agenda for medical effectiveness research will be crafted at a conference of both clinical and social scientists, to be held in early FY 1991. This agenda will help to shape the future direction of MEDTEP and be the basis for new grant and contract research activity;
- The first annual report on the impact of MEDTEP activities on medical care, with emphasis on Medicare, will be prepared (as required by P.L. 101-239);
- A training program in the methods and data requirements of medical treatment effectiveness research will be initiated;
- HCFA will focus on linking, standardizing and improving Medicare and Medicaid databases; adding supplemental measures of health status to existing data; and generating special data sets for the investigation of specific subpopulations of beneficiaries;

- HRSA will help to assure the adoption of the results of medical effectiveness research into medical practice; this will be facilitated by HRSA's long-standing support of medical education and curriculum development, and its historic ties to State licensing bodies; and

- The guidelines program will facilitate the development of an initial set of guidelines, standards, performance measures, and review criteria for three clinical treatments or conditions by January 1, 1991.

Funding levels for the past five fiscal years were as follows:

1986	---
1987	---
1988	$1,915,000
1989	$5,877,000
1990	$37,536,000

Rationale for the Budget Request

The FY 1991 request for MEDTEP is $48,518,000, an increase of $10,982,000 over the FY 1990 estimate. The FY 1991 request is comprised of: $14,065,000 in appropriation from the general funds of the Treasury; $28,000,000 in Medicare Trust Funds Transfer; $6,453,000 in PHS Evaluation Funds. This will increase current efforts and add to the momentum given to the overall MEDTEP in FY 1990.

Outcomes research motivates us to ask what difference medical care makes with respect to health outcomes. The production and documentation of scientific findings by health services research about this difference, and active dissemination of these findings, will help to inform medical decisionmaking and lead to a more effective and efficient health care system.

In FY 1991 this activity is requesting $48,518,000 and 32 FTEs. This is a net increase of $10,982,000 and 5 FTEs over the FY 1990 program level and represents a program increase of $10,954,000 and 5 FTEs and the following built-in costs:

Annualization of 1990 Pay raise	$+11,000
January 1991 pay raise	+55,000
Within grade increases	+15,000
One extra day of pay	+4,000
DHHS Working Capital Fund	+2,000
PHS Service and Supply Fund	+11,000
FERS	+2,000
FTS	+1,000
Rent to GSA	+2,000
Total	+103,000

A total of $75,000 of the built-in cost increases will be absorbed.

Output data ($'s in 000)

	FY 1990		FY 1991	
	#	$	#	$
Outcomes Research and Data Development				
Research Grants				
New	36	$19,532	35	$16,365
Continuation	7	4,900	28	13,950
Subtotal	43	$24,432	63	$30,315
Contracts	7	$3,216	8	$ 3,528
Interagency Agreement with HCFA	1	$ 4,800	1	$ 6,500
Training Grants	10	$1,000	13	$ 1,300
Guidelines				
Contracts/cooperative agreements	6	$1,200	9	$ 2,000
Dissemination				
Research Grants	3	$ 700	7	$ 1,700
Interagency Agreement with with HRSA		$ 300		$ 1,000

General Health Services Research and Technology Assessment

Authorizing Legislation - Title IX and Section 301 of the Public Health Service Act (PHSA).

	FY 1990 Current Estimate		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Budget Authority (Obligations)...	99	$12,161,000 (50,533,000)	102	$12,226,000 (48,886,000)	+3	+$65,000 (-$1,647,000)

1991 Authorization.......................... $50,000,000*
*This is also the authorization for the HIV program.

Purpose and Method of Operations

General Health Services Research and Technology Assessment includes four major activities: General Extramural research; General Intramural research; Dissemination; and the Office of Health Care Technology Assessment.

Estimated Program Level
(Obligations)

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	Amount	FTE	Amount	FTE	Amount
General Extramural Research	32	$30,215,000	34	$29,434,000	+2	-$781,000
General Intramural Research	42	17,681,000	43	16,776,000	+1	-905,000
Dissemination	17	1,970,000	17	1,988,000	---	+18,000
Office of Health Care Technology Assessment	8	667,000	8	688,000	---	+21,000
Total	99	50,533,000	102	48,886,000	+3	-1,647,000

General Extramural Research

The general extramural research program supports investigator-initiated, peer-reviewed health services research projects to inform and assist health care decision makers in meeting society's health services needs. The AHCPR develops new knowledge through health services research by testing the assumptions on which current health policies and practices are based and examining new ways to organize, finance, and deliver health services.

The Agency will support rural health research, as stipulated in Section 902(b) PHSA, on the delivery of health care services in rural areas; and the health of low-income groups, minority groups, and the elderly. It is the objective of AHCPR: to examine the effects of the rising cost of health care on the access to care, the cost and financing of care, and the health status of disadvantaged and underserved populations; to undertake and support research, evaluation, and demonstration projects respecting the delivery of health care services in rural areas which may include studies of the future of the rural hospital, long-term health care for the rural elderly, hospital care for the rural poor and uninsured, and alternative health care delivery systems and managed health care in rural and underserved areas. This work is coordinated with the Office of Rural Health Policy in HRSA.

The AHCPR will fund grant and contract proposals on medical malpractice which will add to our knowledge, for example, of "what works" in tort reform, what percentage of untoward medical events result in a claim of negligence, and the outcome of the claim. The Agency also may sponsor a conference which will provide an appropriate forum for exchange of research findings on medical malpractice as well as contribute to the Department's establishment of a research agenda on medical malpractice. This is a Departmental initiative to increase collaboration with States and private sector organizations to promote rapid, fair, and cost effective resolution of claims of medical malpractice. This effort, consistent with the Department's strong interest in promoting efficient and cost effective delivery of quality health care services, and access to such services to all segments of the population, builds on other Departmental efforts such as facilitation of practice guidelines and support of patient outcomes research. Of particular concern to the Department is to assure that the tensions surrounding the issue of cost of liability insurance to physicians and other health care providers and institutions does not affect access to quality obstetrical and pediatric care for underinsured, and low income groups.

There continues to be a need for data development and analysis of claims and disposition of claims, including data on socioeconomic characteristics of claimants. There also is need for sound research and evaluation of the effect of State tort reform efforts on the frequency of claims.

AHCPR supports and conducts research on specific health care technologies, methods to improve technology assessment, and ways to monitor and effect the introduction and use of health care technologies. The term "health care technology" includes drugs, devices, and procedures used in providing health services and the organizational and supportive systems through which health care is delivered.
The Agency will enter into an interagency agreement with the National Library of Medicine to establish an information center on health care technology assessment.

General Intramural Research Program

The general intramural research program provides analytic support to the Department, other Federal agencies, and the Congress on issues related to health services and health policy. To assist in this effort, the program has assembled several large data sets which facilitate health policy research and timely responses to requests for assistance. In recent years, these data sets have been updated and expanded and now represent a unique and important resource for policy studies.
The intramural research program uses these data to conduct studies in three major areas of inquiry:

- personal health care use, cost, and financing;
- hospital costs and utilization; and
- long term care costs and financing

The National Medical Expenditure Survey (NMES)

The National Medical Expenditure Survey provides the Federal Government with current information on how Americans use, pay, and finance personal health care services.

There has been growing demand for longitudinal data for policy research and analysis on issues of the elderly. In response AHCPR proposed a resurvey of those persons over 65 years who provided information for the 1987 National Medical Expenditure Survey (NMES). The proposal is based on the need for data to analyze changes in health status, use of services, and health expenditures by the elderly over time.

The 1992 NMES Resurvey would reinterview those persons who were 60 years or older in the original NMES sample. The resurvey would employ essentially the same design and questionnaires used in the 1987 NMES. This approach will enhance analyses that seek to describe and explain changes over time. Total cost will be approximately $25.0 million spread over four years.

The Hospital Studies Program (HSP)

The Hospital Studies Program was established to: understand patterns of hospital use and cost; and analyze hospital behavior in response to changes in Federal policies and in the structure of the industry.

The various research studies undertaken by the Hospital Studies Program are conducted primarily through the Hospital Cost and Utilization Project (HCUP) and the State Hospital Data Project (SHDP). Both projects are dependent on very large data bases that have been developed over the past decade to facilitate hospital-related policy research.

Because of their size, these data sets provide the means to study even very rare medical events. Both data sets are being employed to study patients hospitalized for AIDS. For example, the relatively large number of AIDS cases included in the New York State data has provided information used to stage hospitalized AIDS patients by severity of illness. Such staging is essential to studies that compare different therapeutic approaches to treating these patients or to compare costs of treatment across different hospitals. These data also have been used to examine the financing of care for this costly illness.

Dissemination

The purpose of the Agency's Dissemination activity is to enhance the public's understanding and adoption of the findings of the Health Services Research undertaken by AHCPR. The value of research is totally dependent on the access to it. While we are aware that access does not necessarily change practitioner or patient behavior, it is the first step. Efforts to engage in evaluation on the relative effectiveness of alternative methods to influence these two principal groups regarding the patient outcomes and effectiveness programs, and practice guidelines. The dissemination effort will develop processes to improve the knowledge transfer to practitioners, other providers, insurers, State legislators, local governments, health policy makers, patients, and the general public. These processes will include short and long term training, linkages with libraries, improved linkages with the trade and general print and electronic press, as well as synthesis of the research in the scientific journal literature. Additionally, workshops will be conducted to convey relevant and timely health services research findings and related information to state and local government policymakers in a manner that allows such officials to absorb this information and thus heighten the possibility of research being employed in the decision making process.

Office of Health Care Technology Assessment

Through the Office of Health Technology Assessment, AHCPR evaluates the safety and effectiveness of new or existing medical technologies and procedures that are being considered for coverage under Federally reimbursable health programs. These assessments are done at the request of HCFA and other Federal health programs which use them in policy formulation and decision making processes involving issues related to coverage.

Funding levels for the past five fiscal years for general health services research and technology assessment were as follows:

1986	$23,314,000
1987	$44,676,000
1988	$24,958,000
1989	$36,141,000
1990	$50,533,000

Rationale for the Budget Request

The total FY 1991 request for General Health Services Research and Technology Assessment is $48,886,000, a decrease of $1,647,000 from 1990. The FY 1991 request is comprised of:

$12,226,000	in budget authority;
1,037,000	in Medicare Trust Funds Transfer;
34,323,000	in PHS evaluation funds; and
1,300,000	in National Research Service Awards

In FY 1991 this activity is requesting $48,886,000 and 102 FTEs. A net decrease of $1,647,000 from the 1990 availability, and an increase of 3 FTEs. This is comprised of increases of $165,000 for 3 FTEs and the following built-in costs:

Annualization of 1990 Pay raise	$+39,000
January 1991 pay raise	+244,000
Within grade increases	+52,000
One extra day of pay	+13,000
DHHS Working Capital Fund	+5,000
PHS Service and Supply Fund	+31,000
FERS	+9,000
FTS	+3,000
Rent to GSA	+5,000
Total	+401,000

Decreases totalling $2,213,000 reflect: the cost of data collection and processing for the NMES program being $908,000 less than FY 1990; a reduction in PHS evaluation funds; and the absorption of $199,000 of built-in costs.

Output data ($ in 000's)

	FY 1990		FY 1991	
	#	Amount	#	Amount
Grants:				
New	47	$9,523,000	10	3,986,000
Continuation	41	8,154,000	52	11,522,000
Subtotals	88	17,677,000	62	15,508,000
Contracts	24	9,801,000	27	10,713,000
National Research Service Awards	15	1,590,000	15	1,300,000
National Medical Expenditure Survey				
Basic Survey		6,944		5,346
Resurvey of Elderly		4,210		4,900
Hospital Studies Program		3,527		3,530

Human Immunodeficiency Virus (HIV)

Authorizing Legislation - Section 301 and Title IX of the Public Health Service Act

	FY 1990 Current Estimate		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Budget Authority	7	$8,474,000	10	$10,505,000	+3	+$2,031,000

1991 Authorization.......Indefinite

Purpose and Method of Operations

The purpose of the AHCPR's AIDS and HIV-related illnesses program is to evaluate the relationship between medical practices (including treatments and surgical procedures) and patient outcomes; to identify, measure, and assess the outcomes and the costs of alternative practice patterns in order to develop and test feasible and acceptable methods for reducing inappropriate variations; and to develop and demonstrate new mechanisms to disseminate and encourage adoption of patient outcome information for physician decision making that ultimately will improve quality of care.

AHCPR will support research to expand the knowledge base on the cost, financing, quality, and delivery of health care services for HIV-infected and AIDS patients. Two Program Notes outlining the expanded AIDS and HIV-related illnesses research agenda were developed to stimulate new investigator-initiated health services research in FY 1989-FY 1991. In addition, NCHSR and HCFA sponsored a recent conference ("New Perspectives on HIV-Related Illnesses: Progress in Health Services Research") to disseminate the findings of research and to refine the agenda for new studies. Based in part on results of a contract to develop methodologies to estimate various costs associated with AIDS (Anne Scitovsky, Palo Alto Medical Foundation and Research Institute), AHCPR will support the further development and application of these methodologies in FY 1990-FY 1991. Primary data collected from surveys and medical records of patients with HIV-related illnesses will be used to develop longitudinal data bases which will allow AHCPR to determine the functional status of AIDS patients through the course of their illness and the resulting impact of functional status on costs of care.

AHCPR will continue to study patients hospitalized with AIDS and HIV-related illnesses utilizing its specialized hospital data bases (HCUP and HSDP). For example, the relatively large number of AIDS cases included in the New York State data has provided information used to stage hospitalized AIDS patients by severity of illness. (Preliminary findings of this research were presented at the 1988 International AIDS Conference in Stockholm.) Such staging is essential to studies that compare different therapeutic approaches to treating these patients or costs of treatment across different hospitals.

In 1986, the Public Health Service (PHS) published a plan for the prevention and control of AIDS. The plan advocated support for "health services research on AIDS that emphasizes cost of services for different risk groups, stages of illness, and treatment modalities, and assesses the potential improvements of methods and increased cost effectiveness of care." In 1988, PHS representatives met in Charlottesville, Virginia to update this plan. Areas in need of health services research were discussed and incorporated into the 1988 Public Health Service Plan for the Prevention and Control of AIDS and the AIDS virus.

In addition to emphasizing the need to conduct cost analyses, the 1988 plan called for studies that focus on the cost effectiveness and financing of care for illnesses related to human immunodeficiency virus (HIV). Broadening the scope of health services research beyond the economic issues was recommended, for example: developing health measures and information systems for HIV-related care, analyzing barriers to care, investigating HIV-related health systems, examining organizational characteristics associated with effective service delivery, and exploring issues of importance to health care professionals who work with patients infected with HIV or suffering from HIV-related illness.

AHCPR has been asked to investigate ways to add to existing knowledge on health services in HIV-related illnesses. In response, AHCPR is encouraging researchers to submit grant applications to study the availability, cost, and utilization of services for different HIV risk groups, populations, geographic areas, stages of illness, and treatment modalities. Suggested are topics related to the financing of services for AIDS and the effects of the disease on the organization and management of health care services.

Funding levels for the past five fiscal years were as follows:

1986	----
1987	----
1988	$1,000,000
1989	6,830,000
1990	8,474,000

Rationale for the Budget Request

The FY 1991 request for the HIV program in AHCPR is $10,505,000 and 10 FTEs, a 24% increase, or $2,031,000 and 3 FTEs over FY 1990. This increase will provide for built-in costs as follows:

Annualization of 1990 Pay raise	+$3,000
January 1991 pay raise	+10,000
Within grade increases	+5,000
One extra day of pay	+2,000
DHHS Working Capital Fund	+2,000
PHS Service and Supply Fund	+10,000
FERS	+1,000

FTS	+1,000
Rent to GSA	+3,000
Total	+37,000

Additional increases will provide for 3 FTEs ($155,000) and an increase of $2,000,000 to expand the contract for the AIDS Costs and Service Utilization Survey. This expansion will address the health resource utilization of the asymptomatic population. The asymptomatic population is large and pharmaceutical coverage for off-label use of expensive antiviral therapies can be limited. Consequently, the investigation of current patterns of use and financing of services for the asymptomatic population will provide necessary information to policymakers interested in making informed decisions regarding the financing of care and the allocation of demonstration funds. These increases will be offset by a reduction of $5,000 to absorb one half the pay raise and a $156,000 reduction in grants.

Output data ($'s in 000)

	FY 1990		FY 1991	
	#	Amount	#	Amount
Grants				
New	4	$469	6	$723
Continuations	13	3,900	11	3,000
Supplements	—	10	—	500
Subtotals	7	4,379	17	4,223
Contracts				
New			2	5,518
Continuations	1	3,518	—	
	1	3,518	2	5,518

Program Support

Authorizing Legislation - Section 301 and Title IX of the Public Health Service Act

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Budget Authority	34	$2,295,000	34	$2,330,000	--	+$ 35,000

1991 Authorization........................Indefinite

Purpose and Method of Operations

This activity supports the overall direction and management of the Agency for Health Care Policy and Research. This includes the formulation of policies and program objectives for the Agency; program planning and evaluation; grants and contracts management; resource management; and administrative management and services activities.

Funding levels for the past five fiscal years were as follows:

1986	1,853,000
1987	1,861,000
1988	1,886,000
1989	1,921,000
1990	2,295,000

Rationale for the Budget Request

The FY 1991 request of $2,330,000 and 34 FTEs represents a net increase of $35,000 over FY 1990. Increases for built-in costs are as follows:

Annualization of 1990 Pay raise	$+14,000
January 1991 pay raise	+69,000
Within grade increases	+18,000
One extra day of pay	+ 5,000
Working Capital Fund	+ 2,000
Service and Supply Fund	+13,000
FERS	+ 3,000
FTS	+ 1,000
Rent to GSA	+ 2,000
Total	+127,000

$92,000 of these increases will be absorbed.

NEW POSITIONS REQUESTED

	Number	Grade	Salary
Medical Treatment Effectiveness			
Medical Officer	1	CO-05	$29,052
Health Science Administrator	1	GS-14	$52,104
Social Science Administrator	1	GS-13	$44,092
Program Assistant	1	GS-07	$20,902
Statistician	1	GS-13	$44,092
	5		$190,242
General Health Services Research and Technology Assessment			
Clerk-Typist	1	GS-05	$18,564
Public Health Analyst	1	GS-13	$44,092
Medical Officer	1	CO-04	$24,491
	3		$87,147
Human Immunodeficiency Virus			
Economist	1	GS-14	$52,104
Social Science Administrator	1	GS-13	$44,092
Nurse	1	CO-04	$24,491
	3		$120,687

AGENCY FOR HEALTH CARE POLICY AND RESEARCH

Detail of Permanent Positions

	1989 Actual	1990 Estimate	1991 Estimate
ES-4	2	3	3
ES-3	1	3	3
ES-2	0	2	2
Subtotal	3	8	8
GS/GM-15	13	16	16
GS/GM-14	20	20	22
GS/GM-13	11	19	22
GS-12	11	12	12
GS-11	2	5	5
GS-9	8	12	12
GS-8	2	2	2
GS-7	8	7	9
GS-6	10	9	9
GS-5	6	8	9
GS-4	4	8	8
GS-3	0	2	2
Subtotal	95	120	128
Grades established by Act of July 1, 1944 (42 U.S.C. 207)			
CO-08	0	1	1
CO-07	0	1	1
CO-06	3	4	4
CO-05	1	4	5
CO-04	5	3	5
CO-03	1	1	1
Subtotal	10	14	17
Total permanent positions	108	142	153
Unfilled positions, end-of-year	9	0	0
Total permanent employment, end-of-year	117	142	153

ADVISORY AND ASSISTANCE SERVICES

DEPARTMENT OF HEALTH AND HUMAN SERVICES
SALARIES AND EXPENSES

(In Thousands of Dollars)

Account Title and Symbol		1989	1990	1991
Agency for Health Care Policy and Research No. 75-1700-0-1-552				
I. Contractual Services				
Individual Experts & Consultants	B.A.	0.0	0.0	0.0
	Oblig.	0.0	0.0	0.0
	Outlays	0.0	0.0	0.0
Studies, Analyses & Evaluations	B.A.	0.0	0.0	0.0
	Oblig.	0.0	0.0	0.0
	Outlays	0.0	0.0	0.0
Management & Professional Support Svcs.	B.A.	0.0	0.0	0.0
	Oblig.	0.0	0.0	0.0
	Outlays	0.0	0.0	0.0
Engineering & Technical Services	B.A.	0.0	0.0	0.0
	Oblig.	0.0	0.0	0.0
	Outlays	0.0	0.0	0.0
Subtotal	B.A.	0.0	0.0	0.0
	Oblig.	0.0	0.0	0.0
	Outlays	0.0	0.0	0.0
II. Personnel	B.A.	28.8	33.8	40.0
	Oblig.	28.8	33.8	40.0
	Outlays	28.8	33.8	40.0
III. Advisory Committees	B.A.	285.6	403.9	406.5
	Oblig.	285.6	403.9	406.5
	Outlays	203.8	411.5	405.9
TOTAL	B.A.	314.4	437.7	446.5
	Oblig.	314.4	437.7	446.5
	Outlays	232.6	445.3	445.9

NARRATIVE SUMMARY

The Agency for Health Care Policy and Research (AHCPR) employs a limited amount of advisory and assistance services as necessary to meet the demand for highly qualified experts who have specific expertise which, though critical to the Agency's success, is not required on a permanent basis.

AHCPR requires such periodic assistance to aid in the critique and review of research, demonstration, developmental grant application, and health research services survey methodologies. In addition, AHCPR support several legislatively-mandated peer review groups such as the National Advisory Council for Health Care Policy, Research, and Evaluation, and several study sections, review groups, panels, and subcommittees.

THURSDAY, MARCH 8, 1990.

HEALTH RESOURCES AND SERVICES ADMINISTRATION

WITNESSES

DR. ROBERT G. HARMON, ADMINISTRATOR

JAMES A. WALSH, ASSOCIATE ADMINISTRATOR FOR OPERATIONS AND MANAGEMENT

DR. DANIEL F. WHITESIDE, DIRECTOR, BUREAU OF MATERNAL AND CHILD HEALTH AND RESOURCES DEVELOPMENT

WILLIAM H. ASPDEN, JR., ACTING DIRECTOR, BUREAU OF HEALTH CARE DELIVERY AND ASSISTANCE

DR. FITZHUGH S.M. MULLAN, ACTING DIRECTOR, BUREAU OF HEALTH PROFESSIONS

DENNIS P. WILLIAMS, DEPUTY ASSISTANT SECRETARY, BUDGET, OFFICE OF THE SECRETARY

Mr. NATCHER. At this time we take up the budget request for the fiscal year 1991 for the Health Resources and Services Administration, and we have before the committee Dr. Robert G. Harmon. Dr. Harmon, before you give us your statement, tell us who you have with you there at the table.

Dr. HARMON. Thank you, Mr. Chairman.

On my immediate left is Mr. James Walsh, Associate Administrator for Operations and Management; and on his left is Dr. Fitzhugh Mullan, who is the new Acting Director since March 1 of Bureau of Health Professions. On my right is Mr. William Aspden, who is the Acting Director of the Bureau of Health Care Delivery and Assistance.

On his right is Dr. Dan Whiteside, Director of the Bureau of Maternal and Child Health and Resources Development, and on his right is Mr. Dennis Williams, who is the Deputy Assistant Secretary for Budget in the Office of the Secretary.

Mr. NATCHER. Thank you. Now, Dr. Harmon, we will be pleased to hear from you.

Dr. HARMON. Thank you, Mr. Chairman.

This is the first time I have presented a budget to this committee. I was appointed Administrator, of the Health Resources and Services Administration on February 1. For the last four years I was the Director, Missouri Department of Health, and served as Clinical Professor, Department of Family and Community Medicine, University of Missouri School of Medicine.

For five years prior to that I was a local health officer in Maricopa County in Phoenix, Arizona. I hope that my previous experience in state and local public health will help carry out the mission of HRSA. I appreciate the opportunity to appear before you today to discuss the 1991 budget for HRSA.

The 1991 budget continues the agency's preeminent role in providing health care and education to the underserved, disadvantaged and minorities. The 1991 budget of $1,556,822,000 and 1,528 FTEs will meet our commitments through community and migrant health centers, maternal and child health block grants, treatment programs for persons with black lung, Hansen's disease, AIDS, support for health professions students and institutions, and a wide variety of other activities which deal with organ transplants, vaccine injury compensation, health care services for the homeless, and an initiative to reduce infant mortality.

I would also direct your attention to several new or expanded activities within our fiscal year 1990 budget, which is for $1,770,000,000. We are asking, as far as new programs in 1991, for $107,000,000 for a new minority health initiative, featuring an expanded revitalized program of loan repayments and scholarships for service in underserved areas, a program to provide a full range of health care and social services in ordinary public housing units, a community-based recruitment of minorities and disadvantaged program for health professions careers, and more institutional support and faculty development to sustain minority enrollment levels at health professions schools.

Next, we are proposing a $25,000,000 increase to the maternal and child health block grant to implement one-stop shopping, an approach to providing health care, financial assistance, social services, nutrition and other support for pregnant women, and their children.

We are also expanding the infant mortality initiative to add 22 more service sites providing health care to an additional 5000 mothers and their infants. We will continue our agency's fight against the AIDS and HIV epidemic through health service grants in a number of areas with high incidence of AIDS. We also have pediatric service projects, education and training centers, grants to community and migrant health centers for HIV-related treatment, and facilities grants to renovate non-acute intermediate and long-term care facilities.

We will focus our health professions support in 1991 on programs designed to assist minority and disadvantaged students, such as Exceptional Financial Need scholarships, the Excellence in Minority Health program, Financial Assistance for Disadvantaged Students, and the Health Careers Opportunity program.

In 1991 HRSA will address many opportunities and numerous challenges. I believe the budget we are presenting to you this afternoon will enable us to take advantage of those opportunities and meet those challenges.

At this time, Mr. Chairman, I will be pleased to address any questions or comments you may have.

[The information follows:]

Biographical Sketch

Name:	Robert G. Harmon, M.D., M.P.H.
Present Position:	Administrator and Assistant Surgeon General Health Resources and Services Administration U.S. Public Health Service Department of Health and Human Services
Previous Positions:	Director, Missouri Dept. of Health, Jefferson City, MO. January 1986-January 1990. Clinical Professor, Dept. of Family and Community Medicine. University of Missouri/Columbia School of Medicine. July 1986-January 1990.
Birthplace and Date:	Barnsdall, Oklahoma, March 20, 1944
Education:	B.A. - 1962-66, Washington University, St. Louis, MO M.D. - 1966-70, Washington University School of Medicine, St. Louis, MO M.P.H. - 1975-77, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, MD
Post Graduate Training:	Internship and residency internal medicine, University of Colorado Medical Center, Denver, CO. 1970-73. Certificate, Program for Senior Executives in State and Local Government, Harvard University, John F. Kennedy School of Government. July, 1988.
Professional Experience:	Medical officer in PSRO program, Division of Peer Review, Bureau of Quality Assurance, Health Services Administration, U.S. Public Health Service, Department of HEW, Rockville, MD. Aug 1974-Jan. 1975. Director, MEDEX Northwest Division and Assistant Professor, Dept. of Health Services, School of Public Health and Community Medicine; Adjunct Assistant Professor, Dept. of Medicine, School of Medicine; University of Washington, Seattle, WA. August 1977-November 1980.

	Deputy Director of Public Health, Maricopa County Dept. of Heath Services, Phoenix, AZ. December 1980-November 1982. Director of Public Health and Health Officer,Maricopa County Dept. of Health Services, Phoenix, AZ. November 1982-December 1985. Chairman, Department of Community Medicine, Maricopa Medical Center, Phoenix, AZ. December 1980-December 1985. Adjunct Associate Professor, Dept. of Family and Community Medicine, University of Arizona School of Medicine, Tucson, AZ. 1981-85.
Specialty Board Certification:	General Preventive Medicine, 1979.
Specialty Board Eligibility:	Internal Medicine, 1973
Organizations and Memberships:	Association of State and Territorial Health Officials; Executive Committee, 1987-1990. National Association of County Health Officials; President, July 1983-Dec. 1985. Physicians National Housestaff Association; President, 1974-76.

STATEMENT OF THE ADMINISTRATOR OF THE

HEALTH RESOURCES AND SERVICES ADMINISTRATION

Mr. Chairman and Members of the Committee:

I am pleased to appear before you today to discuss the fiscal year 1991 budget request for the Health Resources and Services Administration (HRSA).

HRSA's clients are:

- mothers and children,
- the homeless,
- the poor and disadvantaged,
- minorities,
- the medically underserved,
- migrant workers,
- health professions students,
- persons with AIDS, chronic lung disease and Hansen's disease,
- those in need of organ transplants,
- those who are too sick to leave their homes.

HRSA programs span a wide range of activities. They:

- provide grants or support for personal health services to numerous special populations,
- aid in improving the education, supply, distribution, and quality of the Nation's health professionals; and
- provide technical assistance to enhance the utilization of the nation's health resources and facilities to support these efforts.

In fiscal year 1991, we are requesting approximately $1.6 billion and 1,528 full-time-equivalent positions. Our partners in this effort are State and local health departments, universities, private non-profit organizations, and many other participants in our nation's public health system.

Since 1982, when the HRSA was formed, its mission has continued to rapidly adapt to a changing environment. While our agency's essential focus has remained ensuring health services to persons who might not otherwise receive care, the agency has developed new and innovative approaches to providing that care. At the same time HRSA has accepted responsibility for new programs addressing current public health needs.

Community Health Centers

The FY 1991 request includes $438 million to continue support of approximately 550 grantees providing primary health care services to over 5 million medically underserved people. These underserved individuals include those without access to care because they lack insurance, live in communities without sufficient health resources, have health concerns not met by traditional medical care, or face other barriers to care. The request also includes funding to improve compensation packages for center physicians.

Migrant Health Centers

The FY 1991 request for Migrant Health Centers includes $48 million for the continued support of services to migrant and seasonal farmworkers and their families. Access to health care for this group is very difficult to achieve because of the lifestyle, language, culture, and economic status of most migrant and seasonal farmworkers. Services to approximately 500,000 individuals will be supported. The request also includes funds for improving the compensation for center physicians.

Infant Mortality

In 1991 we are expanding the Infant Mortality Prevention Initiative to $36 million, an increase of $4 million above the 1990 appropriation. This request will support an additional 22 community and migrant health centers to provide case managed services to 75,000 high-risk pregnant women. It also will expand overall perinatal capacity in community and migrant health centers to approximately 190,000 pregnant women per year. This will be accomplished through a proven case-managed, comprehensive approach that will focus on the coordination of appropriate services throughout the high risk mother's child bearing years.

Minority Health Initiative

The FY 1991 budget includes $107 million to launch a Minority Health Initiative. This initiative is made up of several programs designed to increase the number of minority health professionals and to reduce the health disparities between minority populations and non-minority populations as outlined in the 1986 Report of the Secretary's Task Force on Black and Minority Health.

These programs are designed to increase the number of health practitioners serving minority/disadvantaged populations. Key components include:

- the revitalized NHSC loan repayment/scholarship program ($55 million), which focuses support for loan repayments and special scholarships to financially disadvantaged students to serve in the community with which they are familiar,
- a new program, Health Services in underserved

neighborhoods ($35 million), will provide a full range of health services in association with public housing units.

- The Health Professions Institutional Development program ($12 million), providing funds for faculty development and general institutional support to maintain minority enrollment levels,
and
- Community Based Recruitment ($5 million), to support innovative efforts to recruit minority health professionals.

Maternal and Child Health

The Maternal and Child Health block grant allocates funds to States to provide a wide range of health services to mothers and children, including preventive and primary care and rehabilitative services which help alleviate infant mortality problems and provide better access to health care. Our 1991 request is for $579 million, an increase of $25 million above the 1990 current estimate. The request includes:

- $471 million for State Block grants,
- $83 million for special projects of regional and national significance (SPRANS) in the categories of research, training, hemophilia, genetic diseases, and maternal and child health improvement, and
- $25 million for One-Stop shopping to improve the delivery of health care services for pregnant women and infants.

National Health Service Corps

The National Health Service Corps program is designed to improve the capacity to provide health services in Health Manpower Shortage Areas (HMSA) and improve access to health care in these areas through the placement and support of health professionals. This program, and the related recruitment effort play a critical role in the attempt to reduce physician shortages in the most difficult to staff areas throughout the country. The budget request of $42 million will continue the program at approximately the 1990 level.

National Health Service Corps Recruitment

The budget request for NHSC recruitment is $64 million to support scholarships and loan repayments to health professionals and health professions students in exchange for service in a HMSA. The request includes an increase of $55 million associated with the Minority Health Initiative to support scholarships and loan repayments for disadvantaged and minority students.

Homeless

The 1991 budget provides $34 million in new budget authority for a total program level of $46 million for health care to the homeless. This request will support a broad range of primary care, alcohol and substance abuse, and mental health services to approximately 335,000 homeless individuals in approximately 92 health care for the homeless programs. Emphasis will be placed on providing preventive as well as curative services to a broad sector of the homeless including runaway adolescents, homeless pregnant women and children, and individuals with chronic substance abuse and mental health problems. Grants will be made to applicants demonstrating broad community participation and linkages with other community providers of critical support needs of the homeless and effective and efficient provision of care.

Health Professions

At the end of fiscal year 1990 the cumulative Federal investment in Health Professions will total nearly $9 billion. This investment has increased the supply of health professionals. Also, beginning in the late 1970's and through the 1980's, it has addressed more targeted objectives such as primary care, disadvantaged assistance, and improvement in advanced and specialized nurse training.

In recognition of these successes in programs the Administration proposes to shift the emphasis from health professions training to other targeted HRSA priorities such as reducing infant mortality, increasing the number of minority health professionals, providing health services to underserved populations, and supporting AIDS HIV programs.

HRSA will continue to administer the health professions and nursing revolving loan funds which will make available approximately $86 million for loans to about 32,500 students. The budget also includes $185 million in loan guarantee authority for the HEAL program to begin a phase-down.

In addition, the FY 1991 request continues funding for Exceptional Financial Need scholarships, Excellence in Minority Health, and the Disadvantaged Assistance programs which were included in President Bush's amended budget.

National Practitioner Data Bank

The President's FY 1991 Budget proposes to enhance the collection of user fees to cover the full cost of operations of the National Practitioner Data Bank. User fees collected in 1991 will fund the remaining cost of the first phase of the contract and to begin to implement Section V of P.L. 100-93, which will add other health professions to the databank. A primary objective for FY 1991 is to develop a system to monitor and assess compliance with the reporting requirements of the law and to report instances of noncompliance to the Secretary and to the Office of the Inspector General for field investigations.

Organ Transplantation

We believe that the allocation of organs for transplantation is more fair and equitable since the establishment of the national Organ Procurement and Transplantation Network. For example, the number of organs procured but not transplanted has decreased markedly. Also, fewer organs are being shipped overseas and, as a result, more U.S. residents, nation-wide, are receiving transplants. The 1991 budget request includes $3 million to continue support of the Network as well as the Scientific Registry used to track the scientific and clinical status of organ recipients. In additions, the request includes funds to continue support of the agency's Organ Transplantation staff.

Rural Health

The budget request includes $4 million for the Office of Rural Health Policy to fund a total of seven Rural Health Policy/Research Centers. These centers will provide an information base and a policy research capability on a wide range of rural health concerns including access to care, financing systems, alternative delivery systems, and occupational health issues. The request provides funding for a national rural health information center and to staff the National Advisory Committee on Rural Health. Funding to provide technical assistance for hospitals in fiscal trouble is also included.

AIDS

HRSA AIDS/HIV activities continue to be an important part of the battle to control this dreaded disease. In 1991, HRSA is asking for a total of $73 million for AIDS projects. The funds will be used as follows:

- o $19.4 million to continue 7-11 of the HIV health service grants in communities with a high incidence of AIDS;
- o $14.8 million to carry on the pediatric service demonstration projects started in 1988;
- o $21 million to expand the Education and Training Centers set up to instruct health care and related providers in the care, treatment, and support of AIDS sufferers; continued emphasis for curriculum development on AIDS in our nation's health professions and nurse training institutions;
- o $13.3 million to continue the program to provide care in community health centers for persons with AIDS/HIV infection, with the goal of helping to relieve the increasing burden on inpatient and long term care public facilities while improving efforts to mainstream the care for this population into the general health care system; and

- $4.1 for AIDS facilities renovation grants to support construction/renovation projects in nonacute intermediate and long-term care facilities.

Vaccine Injury Compensation Program

The National Childhood Vaccine Injury Act of 1986 established a program to provide compensation for vaccine-related injury or death. HRSA maintains the fiscal records of the claims trust fund and provides medical advice to the court. The 1991 HRSA budget estimates obligations of $222 million for claim payments and other costs to be disbursed from the Vaccine Compensation Trust Fund.

Conclusion

In conclusion I can assure the members that we at HRSA see the coming year as one with many opportunities and numerous challenges, and we are looking forward to working with you in moving the public health agenda forward.

Mr. Chairman and members of the Committee, my associates and I will be pleased to address any questions you may have on the specifics of this budget request.

MINORITY HEALTH INITIATIVE

Mr. NATCHER. Thank you, Dr. Harmon.

Now, as you know, your budget request includes the $107,000,000 that you mentioned for a new minority health initiative. How much of this initiative could you operate under existing legislation, and how much would require new authorizing legislation?

Dr. HARMON. Well, that is a challenging question, Mr. Chairman. A number of discussions are ongoing about that matter. We believe that we would have to amend some of the current authorities to implement our minority initiative, and we are working with the Office of the Secretary, the House, and the Senate to pursue those changes that might be needed.

Mr. NATCHER. No proposed legislation pending at this time?

Dr. HARMON. Well, one bill has passed the Senate, and another is before the House, but so far the administration does not have specific legislation. We are working with the House and Senate on those matters.

Mr. NATCHER. One of these bills as I recall was introduced by our colleague and a member of this subcommittee, Mr. Stokes of Ohio.

Dr. HARMON. That is correct.

Mr. NATCHER. You know about that one.

Dr. HARMON. Yes, we are working closely with Representative Stokes and his staff trying to work out some of the details.

Mr. NATCHER. Your proposed public housing service grants would provide enhanced services, like child care and job training, which are beyond the usual scope of your agency's programs. Would your grants support the cost of these activities, and would there be any cost sharing with other levels of government?

Dr. HARMON. Are you referring to the project, the Centers in Housing projects?

Mr. NATCHER. Yes.

Dr. HARMON. I would like Mr. Aspden to address that one, if he could, Mr. Chairman.

Mr. NATCHER. All right. Go right ahead, Mr. Aspden.

Mr. ASPDEN. I would expect that the money in the HRSA budget will be utilized primarily for primary health care services, and that local resources, state resources and other Federal resources would be used for job training and things like you mentioned.

HEALTH PROFESSIONS PROGRAM

Mr. NATCHER. Why do you feel that it is necessary to propose new programs for your minority initiative rather than relying upon existing programs like Exceptional Financial Need, Disadvantaged Assistance and Excellence in Minority Health Education?

Dr. HARMON. We feel we have some special challenges that we need to deal with in the area of minority health. There are a number of other schools that have a significant minority population who qualify, and we also need to work on the National Health Service Corps as an area of minority health expansion.

I would like to ask Dr. Mullan if he would care to elaborate on the details of that.

Mr. NATCHER. Go right ahead, Dr. Mullan.

Dr. MULLAN. Thank you, Mr. Chairman.

The Health Professions Institutional Development component of our proposal, seeks to provide greater support to both faculty as well as students in these schools. We feel that this incentive program would allow schools, particularly those that have a higher percentage of minority enrollment, to participate in the programs which are Federally funded. We think this is an important component of a broader minority health professions development activity.

Mr. NATCHER. Is it possible that the regular health professions programs like family medicine would produce workers who would serve minority communities?

Dr. HARMON. We certainly focus on minority training in the field of family medicine, in fact all of our health professions programs encourage minority recruitment. We think that family medicine is an excellent specialty for training. Dr. Mullan, would you care to elaborate?

Dr. MULLAN. Certainly, the family medicine and primary care programs have historically supported access to minorities in the health professions. They are not a targeted instrument. This year we are looking specifically to programs that will ensure high minority access to health professions careers.

Mr. NATCHER. Will the schools participating in the Excellence in Minority Health Education program be ineligible to compete for the proposed Minority Institutional Development Program?

Dr. MULLAN. They are eligible.

NATIONAL HEALTH SERVICE CORPS (NHSC)

Mr. NATCHER. In a reversal of past budget policy you are proposing to significantly increase the field strength of the National Health Service Corps. What is your long-term plan for the size of the Corps? Is the 1991 increase a one-time step-up, or is it part of a multiyear expansion?

Dr. HARMON. Mr. Chairman, I am pleased that this would be the start of a significant rebuilding of the Corps. We would recommend that in the out years, 1992 and beyond, that we achieve a total field strength of 3,000, including 2,400 obligated practitioners, and 600 federally salaried practitioners. Of the 2,400 field assignees we would predict about half would be scholarship obligors and about half would be loan repayment obligors.

This would be a further expansion beyond 1991.

Mr. NATCHER. Your proposed $55,000,000 increase in National Health Service Corps funding would be targeted exclusively to minority and disadvantaged students. Do you feel, Dr. Harmon, that there will be enough demand among this population to absorb such a large single-year increase?

Dr. HARMON. We believe that especially from the historically minority schools that we should be able to approach that number. Mr. Aspden could comment on some of the details.

Mr. ASPDEN. Historically, 60 percent of the scholarship recipients have been minorities, so I think there is an adequate pool out there.

Mr. NATCHER. Do your 1991 budget estimates for the Service Corps scholarships and loan repayments include the multiyear cost of commitments first entered into in 1991?

Mr. **Aspden**. Yes, they do. We intend to fund scholarships on a multiyear and loan repayment on a single year.

Mr. **Natcher**. Do you have data to indicate that National Health Service Corps personnel remain in their service area after their obligation has ended, or does the Corps provide a rotating force of medical staff who fulfill their obligation and then leave?

Dr. **Harmon**. In the past, Mr. Chairman, the average retention rate beyond the obligated time was about 30 percent, and lately through increased efforts, screening, face-to-face interviewing, the selection process and increased contact, the retention rate is going to be closer to 35 to 40 percent. And we have additional ongoing efforts under way.

So we are beginning to improve that, and this would be even further enhanced if some of the appropriations are increased to increase the pay of these people serving in the field. They tend to run about 25 percent below the community average in physician pay, and if we can get that up, that will further help the retention rate.

Mr. **Natcher**. What is the obligation now yearwise?

Mr. **Aspden**. It is a year of service for a year of support with a minimum of two years of service obligation.

AIDS/AZT

Mr. **Natcher**. Public Health Service officials were reported last summer as encouraging much greater use of AZT in the treatment of AIDS, and describing the need for Federal funding of the drug. Your budget does not propose any funding for AZT, aside from reimbursement through Medicaid. What is the appropriate Federal role in this area?

Dr. **Harmon**. Mr. Chairman, this is a tough decision. Originally the Federal Drug Reimbursement Program for AZT and other drugs was enacted to give public and private insurers time to adjust their coverage to include drugs that prolonged the lives of persons with AIDS and HIV infection. Medicaid coverage has increased. All states now cover AZT for persons with AIDS, and we feel that can be eliminated at this time.

Other things, as people stay on their jobs longer, are able to stay healthier with this drug, they are able to continue private insurance for longer periods of time. States have risen to the occasion in some places to help pay for the drug, and the price has been coming down and the dose is now half. So we think this is helping.

Mr. **Natcher**. How many state medicaid programs provide AZT for AIDS infected patients who do not yet have symptoms of the disease?

Dr. **Harmon**. Mr. Chairman, this is relatively a new process, with only recent FDA approval for this kind of treatment for asymptomatic HIV-infected persons. We are looking for that kind of data, we don't yet have it available. We know that all provide AZT for persons with diagnosed cases of AIDS.

Mr. **Natcher**. Mr. Conte, I yield.

Mr. **Conte**. Dr. Harmon, I want to welcome you to our committee.

Dr. **Harmon**. Thank you.

NURSE SPECIAL PROJECT

Mr. **Conte**. With your extensive experience and background, I think you are the right man for the job. You are fortunate to have John Kelso with you, he is a seasoned pro and has helped our committee immensely over the years, and I look forward to working with all of you.

The Berkshire Community College in my district has a grant application in to your agency for a nurse special project. They have an ambitious plan to develop a unique nursing education consortium that would increase training access for nurses in rural and underserved areas. Rural nurses face multiple barriers in obtaining access to continuing education and advanced training. The lack of educational resources contribute to the nursing shortage in a lot of these medically underserviced areas.

What has been accomplished so far by the current nurse special projects in improving the supply of nurses in these particular areas that are underserviced?

Dr. **Harmon**. Representative Conte, you have mentioned a couple of important factors, and that is the positive results our nursing demonstration projects have been having, enhancing nursing education and placement, and the rural areas are a special challenge, and are of interest to HRSA, and we also have our Office of Rural Health Policy, which is addressing some of those problems. I would like to ask if Dr. Mullan could comment on the specifics of that particular project.

Dr. **Mullan**. The project you reference, the Berkshire Community College proposal, was reviewed under the Nurse Special Projects grant authority in February of this year, and will go to the advisory council for final determination in May. We are aware of it, and it is a promising proposal. We are aware, of course, of the problems in rural nursing, and a number of our nurse programs, both in education and traineeships, are in support of those, and will continue to be so in the 1990 budget.

COMMUNITY HEALTH CENTERS (CHCS)

Mr. **Conte**. Thank you very much.

Community health centers are a vital source of primary care services for expectant mothers. The center in Holyoke has done an outstanding job in reducing infant mortality. Holyoke used to have the highest infant mortality rate in the whole state of Massachusetts, and with the center up and running, they have now reduced the mortality rate. All over the country, community health centers have cared for over 117,000 low-income pregnant women and 45,000 infants last year. But there is still a substantial unmet need for 32,000 mothers and babies.

The question is, can you tell us what the comprehensive perinatal care program has done in reducing infant mortality, the number of low birth weight infants, and the second part of the question is what can be done to improve the access of low-income women for perinatal care?

Dr. **Harmon**. Representative Conte, we are very involved in working with states and localities and community health centers and others to fight infant mortality. It takes many different parts of the puzzle to get a handle on this problem, community health centers are doing excellent work and the perinatal funding is helping a lot, because we do have an obstetric crisis in this nation, with serious problems in access to early and comprehensive prenatal care.

The research literature does show that community health centers and their comprehensive approach can reduce low birth weight and reduce infant mortality. We are pleased that the program is expanding and would further expand with this 1991 budget proposal.

I would ask Mr. Aspden to address any specifics relative to the project you mention.

Mr. Aspden. I think the expectations we have of the program are those that you have outlined. We expect a significant amount of outreach such that we get the pregnant women, particularly the pregnant teenagers, into our projects in the first trimester and thus have an impact on low birth weight. That is our objective.

INFANT MORTALITY/CASE MANAGEMENT APPROACH

Mr. Conte. That is good. When you talk about case managed approach to reduce infant mortality, what is a case management approach?

Dr. Harmon. That involves either a nurse or a social worker acting as the one-point contact for that patient to help her work her way through the maze of different eligibility programs and services that might be available and should be available, and would be knowledgeable about referral. The $25,000,000 for one-stop shopping should also help make case management even easier, because it would either put things under one roof, or hook them up with official linkages, computer systems and so forth, so that the patient does not have to find her way through this system. She will have help, and not just go away in frustration and come in to only deliver a low birth weight child.

MIGRANT HEALTH CENTERS (MHCS)

Mr. Conte. I got you. Dr. Harmon, the New England Farm Workers Council has been working with your Bureau of Migrant Health for some time to be able to participate in the strategic planning process that would determine the health needs of migrants for the next season. What is HRSA doing to integrate the Council in the planning process?

Dr. Harmon. We have had staff working with the New England state departments of health and the regional primary care associations to develop a plan to increase access to care. During 1991, there will be a competitive process for the award of a grant for more migrant health care services using that newly developed strategic plan. The Council will be eligible to compete for funding through this process, and that will get careful attention.

Meanwhile, interim services for the 1990 migrant summer season will be provided for the Charter Oak Terrace Community Health Center in Hartford, Connecticut.

Mr. Conte. Okay. Will you please keep me informed on HRSA's efforts to work with the Council in the strategic planning stage?

Dr. **Harmon**. I will be pleased to do that.

AIDS/AZT

Mr. **Conte**. Appreciate that.

Doctor, the cost of AZT is still, I think, way out in orbit. And even with the price rollbacks and the new lowered dosages, it still costs $2800 a year to treat an infected patient, up to $6500 with those with full-blown AIDS. With FDA approval more insurers are now covering the cost of these drugs, but as you know, there are millions of uninsured people who have no recourse whatsoever.

How many patients would you say are receiving these benefits?

Dr. **Harmon**. In the current AZT——

Mr. **Conte**. From this program.

Dr. **Harmon** [continuing]. Program? I would have to ask Dr. Whiteside to comment on that.

Dr. **Whiteside**. About 18,000 patients have received benefits under the AIDS drug reimbursement program since it began.

Mr. **Conte**. What other AIDS-related drugs are available through this program?

Dr. **Whiteside**. The states may make a determination on which drugs they wish to cover, but generally they are aerosolized pentamidine and alpha interferon.

Mr. **Conte**. Do children qualify for this program?

Dr. **Whiteside**. Yes, they do.

Mr. **Conte**. The number of children that have been infected with AIDS viruses have grown rapidly, and the CDC predicts that by the end of this year at least 10- to 20,000 children will be infected by AIDS. AIDS is currently the ninth leading cause of death among children ages one to four. At this rate it can become one of the five major causes of death in this age group by 1995.

Given the fast rate of growth and the number of children infected and the high cost of hospital care, what is your agency doing to expand the programs to a larger number of underserviced communities?

Dr. **Harmon**. Representative Conte, I just got some figures on the number of cases, pediatric AIDS children under 13 as of the end of January was 2,055 out of a total overall case count of 121,643. We are pleased that HRSA has been able to work with universities and other programs. I believe the demonstration projects are yielding new approaches to dealing with pediatric AIDS.

As these other programs expand through HRSA, such as our education and training centers, more and more physicians, primary care and other physicians will feel comfortable taking care of these patients, and we expect that there will not be such a fear of AIDS or reluctance to take referrals, including pediatrics AIDS. Meanwhile, prevention has to be a very high priority to prevent infected mothers from having babies with AIDS.

I will ask Dr. Whiteside if he has any further comments.

Mr. **Conte**. And tell me, Dr. Whiteside, what educational efforts do you have to prevent maternal transmission of the virus?

Dr. **Whiteside**. There is considerable effort that is under way. We have several joint projects with the Centers for Disease Control to educate vulnerable populations with respect to how HIV is transmitted.

Mr. CONTE. Your budget mentions there will be new activities targeted at ways to reduce costs. Can you elaborate on cost containment efforts in pediatric AIDS?

Dr. WHITESIDE. Yes. The boarder baby issue is a good example of attempts to reduce costs by getting infants who are infected and abandoned in a hospital moved out into foster care. This is a good example of how one can reduce the cost of care for these children.

PEDIATRIC AIDS

Mr. CONTE. Your agency is setting up a new National Resource Center in pediatric AIDS. What activities will this center be responsible for?

Dr. WHITESIDE. The Center is primarily for the distribution of information. The resource center at Children's Hospital of Newark currently has under way the development with the National Association of Children's Hospitals a manual for the development, management and evaluation of pediatric HIV programs; and the distribution and implementation of that manual will be one of the principal activities of the National Research Center in Pediatric Aids.

Mr. CONTE. Thank you, Mr. Chairman. My time is up.

Mr. NATCHER. Mr. Stokes, I yield.

HEALTH PROFESSIONS PROGRAMS

Mr. STOKES. Thank you, Mr. Chairman.

Dr. Harmon, what is the current situation regarding the enrollment of underrepresented minority persons in health professions educational institutions?

Dr. HARMON. We wish we had a trend in the right direction, but we are not making the kind of progress that we would like to see; although the numbers are going up gradually, the percentages are not. Dr. Mullan perhaps could elaborate on some of the details.

Mr. STOKES. Sure, Dr. Mullan?

Dr. MULLAN. Mr. Stokes, I apologize. I am five days on the job and I have not mastered those figures. We would be glad to supply them to you. It is clearly an area of my own personal concern as well as one of the administration's.

Mr. STOKES. All right. I would like for you then in the record if you will provide me with a chart showing the number and the percentage of minorities enrolled in health professions schools, and I would appreciate it if you would also include the field of nursing.

Dr. MULLAN. Certainly.

[The information follows:]

TOTAL ENROLLMENT IN SELECTED HEALTH PROFESSIONS SCHOOLS IN THE U.S. BY RACIAL/ETHNIC CATEGORY

Occupation and Academic Year	Total	Minority Enrollment		Black		Hispanic American		Native American		Asian American	
		No.	%	No.	%	No.	%	No.	%	No.	%
Allopathic 1988-89	65,300	14,393	22.0%	3,995	6.1%	3,566	5.5%	237	0.4%	6,595	10.1%
Osteopathic 1987-88	6,586	653	9.9%	122	1.9%	208	3.2%	36	0.5%	287	4.4%
Dentistry 1988-89	17,094	4,411	25.8%	934	5.5%	1,038	6.1%	63	0.4%	2,326	13.6%
Optometry 1987-88	4,509	688	15.3%	117	2.6%	139	3.1%	22	0.5%	410	9.1%
Pharmacy 1987-88	21,418	4,835	22.6%	1,729	8.1%	1,055	4.9%	45	0.2%	2,000	9.3%
Podiatry 1987-88	2,609	506	19.4%	237	9.1%	95	3.6%	5	0.2%	156	6.0%
Veterinary 1988-89	8,558	583	6.8%	200	2.3%	196	2.3%	47	0.5%	94	1.1%
Regis. Nursing[1] 1988-89	184,924	29,033	15.7%	19,047	10.3%	4,993	2.7%	925	0.5%	4,068	2.2%
Prac. Nursing[2] 1985-86	39,345	9,090	23.1%	6,650	16.9%	1,495	3.8%	394	1.0%	551	1.4%
Public Health 1986-87	8,558	1,454	17.0%	484	5.7%	524	6.1%	68	0.8%	378	4.4%

[1] Data are estimated to reflect total enrollments. Based on information supplied by 87 percent of the programs.

[2] Data are estimated to reflect total enrollments. Based on information supplied by 73 percent of the programs. 1985-86 is most recent data year available on total enrollments of practical nursing students.

Mr. **Stokes**. All right. Dr. Harmon, I see that $4,600,000 increase is proposed for the Disadvantaged Assistance Program. Over the past few years, I have received several inquiries expressing concern for unfunded Health Careers Opportunity Program grant applications. Can you tell us how many more HCOP grants could be funded with this increase?

Dr. **Harmon**. Again, I would need to ask for assistance from Dr. Mullan.

Dr. **Mullan**. We are asking for an increase in the budget for the Disadvantaged Assistance Programs. Of this increase, $3,690,000 is for the HCOP grants. This will enable us to fund a total of 177 HCOP projects, which is an increase of 25 projects over the FY 1990 level.

Mr. **Stokes**. Thank you, Doctor.

Can you tell us what has been the effect of the 20 percent set-aside for Financial Assistance for Disadvantaged Health Professional students on the number of projects funded each year under HCOP?

Dr. **Mullan**. Yes, sir, I can. Since the 20 percent set aside requirement for Financial Assistance for Disadvantaged Health Professions Students was enacted in FY 1985 and first affecting HCOP grants in FY 1986, has indeed meant a diminution in the number of HCOP grants that have been made over this time. The precise number—well, I am afraid I will have to give you those for the record.

Mr. **Stokes**. All right. If you will provide that for the record, that will be fine.

[The information follows:]

[Funds are in Thousands]

Fiscal year	Authorized	Appropriation	EFN	HCOP funds awarded	HCOP projects funded	HCOP projects approved not funded
1985	24.0	24.0	0.0	24.0	191	29
1986	26.0	25.5	4.8	19.5	161	67
1987	28.0	27.2	5.4	21.6	167	84
1988	30.0	27.4	5.5	21.6	156	122
1989	31.2	27.1	5.4	21.1	158	107

MINORITY HEALTH BILL

Mr. **Stokes**. Dr. Harmon, I guess you have been asked some questions relative to the Stokes and Stokes-Kennedy minority health bills and the Secretary's minority health initiative. I am particularly interested in the proposed HUD/HHS initiative as proposed by the Secretary. Can you tell us a little bit more about that?

Dr. **Harmon**. Right. That would be for clinics to be located in housing projects, and we think that is a very needed approach to making health care more accessible to these populations.

I believe there is about $35,000,000 in there for the project; and the recipients of those funds would be organizations, agencies, that have a track record in this area and could guarantee high quality comprehensive primary care services in these housing projects.

Perhaps Mr. Aspden could elaborate a little bit.

Mr. **Aspden**. It's envisioned that the grant recipients would be the organization to provide primary health care services, case managed care, and would work with local and state agencies to provide job training and other social services.

It's a one-stop social service concept in public housing areas.

Mr. **Stokes**. Okay. Now, you will have to send legislation up for that, won't you?

Dr. **Harmon**. Not entirely. There are discussions going on between Congress and the Administration relative to what parts of that minority health package would need legislation and what would not.

I am not sure about the HUD proposal.

Incidentally, the program request is $35,000,000, Representative Stokes in that part of the package.

COMMUNITY AND MIGRANT HEALTH CENTERS

Mr. **Stokes**. All right.

Now, let me go to another point here. The community and migrant health center movement is celebrating its 25th year, and as your are probably aware, the Pepper Commission recommended that these centers be strengthened so that they can provide services to more underserved people.

How does the Department measure how well community and migrant health centers provide access to care?

Dr. **Harmon**. We have a number of evaluations going on, Representative Stokes, and some of these are outcome measures.

We have already mentioned that these centers can have an impact on lowering infant mortality. They also can result in higher immunization rates and earlier prenatal care access. So the literature is showing good results from these clinics. Also, when a patient is going to a comprehensive clinic like this, the outcome on birth weight seems to be improved.

Mr. Aspden might want to add a few more facts to that.

Mr. **Aspden**. Each year each grantee goes through a review process. It's more comprehensive every three years when they go through a competitive process. When they go through their annual continuation process, they are assessed on the basis of the need in the community, the community impact, the management and administration of the project, clinical capacity and inpatient outcomes.

Also, we measure how well they are doing against what they identify as their target.

Mr. **Stokes**. $506 million was appropriated in fiscal year 1990 for the community and migrant health centers. How much of this has been awarded to the centers?

Mr. **Aspden**. Approximately one half of the amount available in 1990 has been awarded.

Mr. **Stokes**. And can you tell us or account for what reason the other half remains?

Mr. **Aspden**. We awarded grants continuously over an eight-month period of the fiscal year in order to avoid concentrating the workload in any one part of the year. We start making grants in December and complete the process in July.

Mr. STOKES. Can you tell us whether there is a need for expansion and renovation of health centers?

Dr. HARMON. We think there are a number of needs with the community health centers. We have recommended in this 1991 budget that a top priority would be pay increases to recruit and retain physicians and other health professionals at these centers.

And we also have the perinatal initiative expansion, which is another priority. We would, of course, have this $35,000,000 initiative for new starts in housing projects.

Mr. STOKES. In the health centers, have services had to be cut to accommodate the increase in the number of people being served?

Dr. HARMON. I have to ask Mr. Aspden to comment on work load in the centers. It's my impression that with the expansion for pregnant women and children, more people are eligible, and there has been an opportunity for greater reimbursement for services in community migrant health centers, which has led to an increase, and perhaps expansion in some cases, in the centers.

Mr. STOKES. Mr. Aspden, do you care to comment?

Mr. ASPDEN. The Federal statute is specific as to the types of mandatory and ancillary services that we pay for.

There has not been any significant or even any minor reduction in those kinds of services.

Some health centers have had to cut back on services they provide that were not being reimbursed by the Federal government.

Mr. STOKES. What about the shortage of doctors at the health centers? Is there a shortage?

Dr. HARMON. Well, we are trying to rebuild National Health Service Corps as a health provider system for these centers, and we are pleased that the $55,000,000 has been recommended for National Health Service Corps scholarships and loan repayment, and that should begin to rebuild and replace the number.

We have been losing National Health Service Corps assignees, and we, for example, are losing about 600 this summer and only replacing with about 120 scholarship obligors.

But we will be rebuilding from there and building back up, we hope pretty rapidly, if this is approved.

Mr. STOKES. Thank you.

Thank you, Mr. Chairman.

AIDS

Mr. NATCHER. You are proposing a 50 percent increase in funding for the AIDS education and training centers, but many of the other AIDS programs would receive only small increases, Dr. Harmon, or would be eliminated altogether.

Why are the education and training centers given such high priority?

Dr. HARMON. Mr. Chairman, this is in line with high priority HRSA places on education and training as an important Federal role.

We think it's important to educate more health professionals, health providers around the country, to increase their clinical skills so that they will be more willing to take care of persons with AIDS and HIV infections.

And it's a rapidly changing field with new medications coming on, and some providers are actually overloaded out there.

For example, the internal medicine infectious disease specialists are getting overloaded with persons with AIDS, and some cities have had to set up systems of referral to spread out the case load.

So we think that this approach is working quite well with these multi-state training centers in getting the word out and getting patients better care closer to home.

HEAL/SLIF

Mr. **Natcher**. Dr. Harmon, why are you requesting that returned health profession and nursing student loan funds be applied to HEAL defaults, when even without these funds you project a surplus of almost $10,000,000 in the HEAL default account at the end of 1991.

Dr. **Harmon**. Mr. Chairman, we don't consider that to be an actual surplus. This transfer only provides a contingency fund that we do not anticipate using in fiscal year 1991. It should be noted however that our total liability estimate for HEAL is still in the hundreds of millions of dollars.

That has not changed.

Mr. **Natcher**. Would these funds ordinarily be allocated to other schools for new loan activity?

Dr. **Harmon**. I would have to ask Dr. Mullan to comment. My understanding is yes, that is what would ordinarily be done.

Dr. **Mullan**. Mr. Chairman, these health professions student loan and nursing student loan funds would normally be reallocated within the pool of schools participating.

Mr. **Natcher**. In the past you have had great difficulty in projecting the balances of the HEAL Student Loan Insurance Fund. What is your current estimate of when the fund's resources will be exhausted?

Dr. **Harmon**. We do have projections of defaults on HEAL in the out years that will be growing. Perhaps Dr. Mullan could comment on this.

Dr. **Mullan**. The litigation requirement and experience, consequently, continue to underscore difficulties in estimating the timing at which accounts will be submitted to the Government as default claims.

We supplied you, Mr. Chairman, on February 2 with a letter estimating the out year obligations of HEAL and SLIF, and we will be glad to re-submit that for the record.

[The information follows:]

Health Resources and
Services Administration
Rockville MD 20857

FEB 2 1990

The Honorable William H. Natcher
Chairman, Subcommittee on Labor/HHS/Education
Committee on Appropriations
House of Representatives
Washington, D.C. 20515

Dear Mr. Natcher:

In the House Report accompanying H.R. 2990 (Rpt. 101-172, pp. 37-38), the Committee on Appropriations requested that the Department provide a semi-annual report on the status of the Health Education Assistance Loan (HEAL) Student Loan Insurance Fund (SLIF) and projected appropriations needs for the next five years. The Committee requested that the first report be submitted prior to the start of the Fiscal Year 1991 budget hearings. This report responds to the Committee's request.

At the outset, we would like to comment briefly on the HEAL litigation requirement, largely due to its significant effect on any projections of SLIF activity. Under this requirement, which was added to the HEAL regulations in January 1987 and the HEAL statute in November 1988, lenders and holders must obtain a judgment against a HEAL borrower prior to filing a default claim. Because the requirement is relatively new, little historical data exist to assess its effect on the timing of the submission of default claims. Of the 1,836 defaults worth $62.3 million that have entered the litigation process, more than 80 percent are still being litigated; 25 percent have been in litigation for more than 350 days; and less than 7 percent have completed litigation and been submitted as claims.

The litigation requirement and experience, consequently, underscore difficulties in estimating the timing at which accounts in litigation will be submitted to the government as default claims. (Please see Tab A for greater detail.) Despite this caveat, however, adequate data exist to predict that approximately 90 percent of the accounts that enter litigation eventually will be submitted as default claims. Accordingly, we believe that projections which encompass a longer period of time, such as a 5-year period, would be more meaningful and have a greater reliability for assessing SLIF needs than single-year projections.

Notwithstanding the above, and in accordance with the Committee's request, this report provides our current estimates of annual SLIF needs for the next five years. Based on the Administration's Fiscal Year 1991 Budget Submission, which would phase out the HEAL program in Fiscal Year 1990 rather than Fiscal Year 1991, the Department is projecting that the SLIF balance at the end of each fiscal year through 1995 will be as follows:

Fiscal Year	Estimated SLIF Balance ($000)
1990	35,288[1]
1991	8,373
1992	(29,999)
1993	(80,366)
1994	(143,809)
1995	(216,768)

To maintain the solvency of the SLIF during this period of time, the following levels of appropriations would be required:

Fiscal Year	Appropriation Amount ($000)
1991	15,000[2]
1992	14,999
1993	50,367
1994	63,443
1995	72,959

To assist the Committee in understanding how the Department developed these SLIF projections and appropriations needs, we have included at Tab B a discussion of the assumptions used in estimating SLIF activity over the next five years. These assumptions form the basis for two forecasting models which have been developed as part of our efforts to improve our ability to project SLIF balances. In the development of these models, a concerted effort has been undertaken to seek

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1/Includes the $25,000,000 appropriation to the SLIF provided in the FY 1990 budget.

2/The Administration is proposing that this amount be transferred to the SLIF from excess cash returned to the Department under the Health Professions Student Loan and Nursing Student Loan programs.

technical review and consultation from multiple sources in the private and public sector. We would be pleased to share the detailed documentation of these models with you at your request.

We hope this information is responsive to the Committee's needs. Please let us know if we may be of further assistance.

Sincerely yours,

RGHarmon

Robert G. Harmon, M.D., M.P.H.
Administrator
Assistant Surgeon General

Enclosures

Tab A

HEAL Litigation

Background

Public Law 100-607, enacted November 4, 1988, amended Title VII of the Public Health Service Act to require that HEAL lenders and holders obtain a judgment against a defaulted borrower prior to submitting a default claim for payment from the HEAL SLIF. The legislation codified and expanded the scope of a regulatory requirement that was included in HEAL regulations published in the Federal Register January 8, 1987.

Current Status

Through January 4, 1990, 1,836 defaults valued at $62.3 million have entered litigation. One hundred twenty-seven (127) defaults valued at $3.6 million, or 6 percent of the total dollars, have completed litigation and have resulted in claims. One hundred fifty nine (159) defaults worth $4.1 million have been cured during litigation and have not resulted in claims. Forty-two (42) defaults valued at $1.1 million filed for bankruptcy while in litigation, before a judgment was obtained and litigation was completed. One thousand five hundred eight (1,508) defaults worth $53.5 million remain in litigation. We estimate that 90 percent of these defaults will result in judgments and valid claims against the SLIF in the future.

The principal institutions seeking judgments against HEAL defaulters are Chase Manhattan Bank (Chase) and the Student Loan Marketing Association (Sallie Mae), which collectively own 75 percent of the loans in repayment. Chase initiated litigation in November 1987 and Sallie Mae started litigating in September 1988. Staff of the Bureau of Health Professions have conducted conversations with Chase and Sallie Mae to determine the effect of the timing of litigation on the submission of judgments for payment. It appears that judgments requiring minimal intervention can be obtained in 6 to 9 months. The 127 judgments paid to date reflect an average time of 282 days from initiation of litigation to claims payment, and fall primarily into this category. In those cases that occur in jurisdictions with crowded court dockets, or where service of the defaulter is difficult to accomplish, or where the process is delayed through extended discovery and other legal complications, obtaining a judgment can take an as yet undefined period of time. Of the 1,508 defaults currently in litigation, 459, or 30 percent, have been in litigation for more than 350 days; 89 have been in litigation for more than 550 days.

A computer-based model, using Lotus 1-2-3, has been developed to measure and track short-term fluctuations in key variables affecting the HEAL SLIF balance. The principal variable has been the time it takes from the initiation of litigation to payment of a judgment. As noted previously, only 127 judgments have been paid to date and thus minimal data exist on the time required to complete the litigation process. The output of the model is a monthly projection of the HEAL SLIF balance through September 1991. The lack of statistically valid experience in the timing of litigation and the resultant effect on SLIF projections is reflected on the enclosed chart, which displays SLIF projections at various points in time. In April 1989 the model projected a negative SLIF balance of $9 million by September 30, 1989. Using the same basic model, with refinements to account for the most recent litigation information and the appropriation of $25 million in November 1989, the model now projects a positive SLIF balance through September 30, 1991 and into early Fiscal Year 1992.

The difficulties encountered in projecting SLIF balances, as reflected on the chart, are primarily due to the lack of historical information on litigation. These difficulties in making accurate SLIF projections can be expected to continue until there is considerably more data on the average amount of time required to obtain a judgment against a defaulted HEAL borrower.

Tab B

Assumptions Used in Estimating SLIF Activity Through FY 1995

The underlying assumptions used to estimate SLIF activity through FY 1995 are as follows:

(1) HEAL program requirements will not undergo any dramatic changes over the estimating period.

(2) Borrowing will decrease at a rate reflecting program phasedown.

(3) Future amounts entering litigation will reflect amounts entering repayment and amounts in repayment.

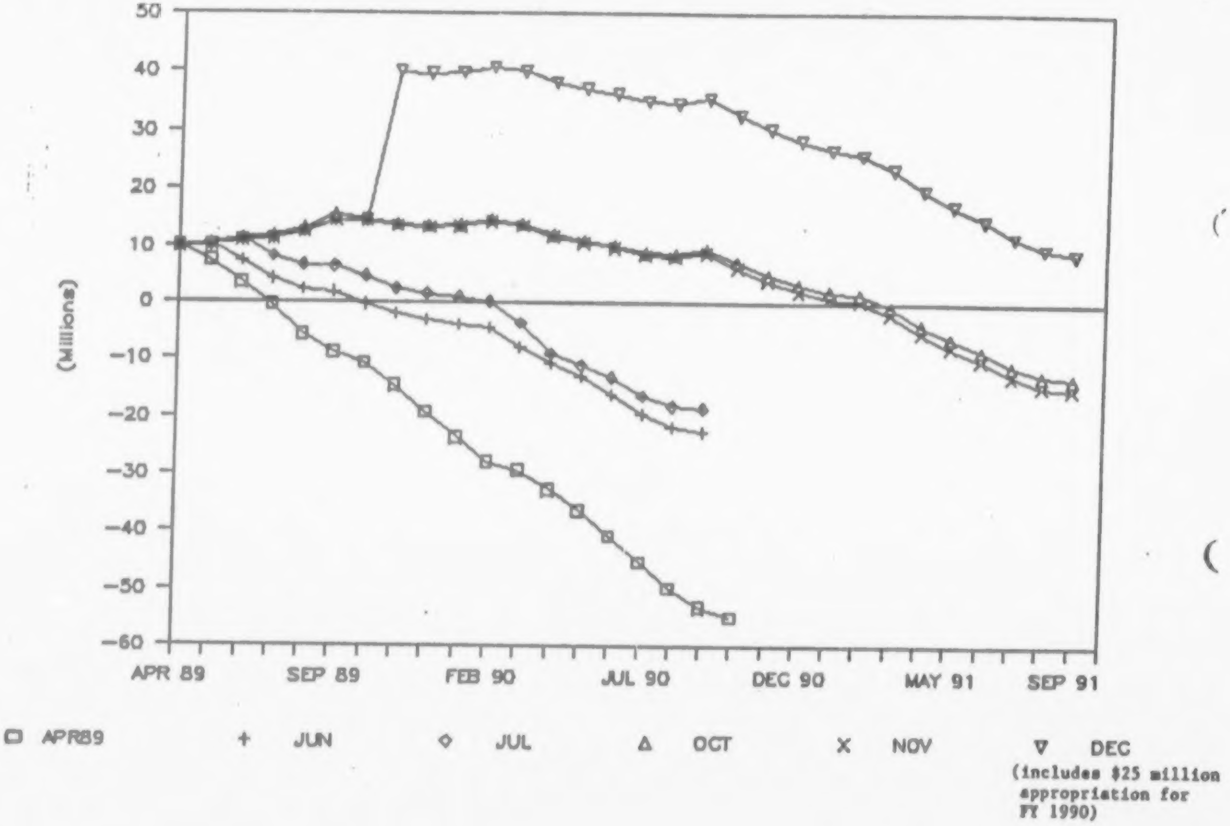
(4) Amounts in and entering litigation will be paid as claims on a time schedule estimated from the limited data available on paid claims which have been litigated and the assumption of a 3-year litigation cycle.

(5) Death, disability, and bankruptcy claims will increase based on increased amounts entering and in repayment.

(6) Non-litigated default claims will increase only slightly, since most claims will be required to go through the litigation process.

(7) Collections on defaulted loans will increase as cumulative defaults increase.

PROJECTED HEAL SLIF BALANCES



Mr. NATCHER. What is your projection in regard to HEAL default payments over the next five years?

Dr. HARMON. Our current projections are for $30,000,000 in defaults for this fiscal year, working their way up to $81,000,000 in fiscal year 1995.

We have recommended that this program be gradually phased out and replaced by other types of loans.

MEDICAID REIMBURSEMENT

Mr. NATCHER. The 1989 Reconciliation Bill significantly increased the potential for Medicaid reimbursement for community and health centers although your budget projects the same rate of increase in Medicaid reimbursements in 1991 as it did for the prior year.

Do your projections take the new law into consideration?

Dr. HARMON. Mr. Chairman, my understanding is that we were expecting increased medicaid revenues for those centers from $165,000,000 in 1990 to $185,000,000 in 1991, and this, I think, reflects the implementation of Medicaid expansion.

Also, the increase in Medicaid revenues may even be greater than anticipated because OBRA 89 requires Medicaid programs to pay at cost to these centers and other certain providers.

Those methodologies need to be worked out, and we are in contact with HCFA. We hope that can be expedited because that will be extremely important in paying the costs of prenatal care, child care, which will be a big incentive for these centers to recruit more patients.

ONE-STOP SHOPPING

Mr. NATCHER. Your one-stop shopping initiative for the maternal and child health program would require the committee to override the authorizing statute's formula for distribution of these funds.

Could you instead operate the one-stop shopping program within your existing special projects authority?

Dr. HARMON. I will have to ask Dr. Whiteside to respond to this question.

Dr. WHITESIDE. We you have the authority to operate it under our existing authority. What we don't have, though, is the authority to earmark the $25,000,000 for that purpose, and I think that is what we are trying to achieve, to see that there is a specific earmark of funding for those activities.

HOMELESS PROGRAMS

Mr. NATCHER. Last year, the Administration emphasized its proposal to fully fund the McKinney Homeless Programs.

This year, as you know, your budget proposes to fund health care for the homeless at half the authorized level.

What is the basis for this change?

Dr. HARMON. Our 1991 request continues the program at the fiscal year 1990 level. There were some aspects of that regarding carry-over funds which perhaps Mr. Aspden could clarify.

Mr. ASPDEN. The 1991 request follows the lead of the Congress. Last year the Congress appropriated this level of funds.

HEALTH PROFESSIONS FTE

Mr. **Natcher**. How many full-time equivalents are associated with the proposed reduction in health profession funding, and tell us if this would require a reduction in force?

Dr. **Harmon**. Mr. Chairman, 105 FTE would be affected, but we would hope that if this happened, we could absorb these FTE into other new program areas and not have to go through a reduction in force.

HANSEN'S DISEASE CENTER

Mr. **Natcher**. Your budget describes a plan to restructure services for Hansen's disease patients, including changes for the Carville facility.

Describe, if you will, your plan in more detail and identify any changes that have occurred since the budget was submitted in January.

Dr. **Harmon**. Mr. Chairman, I am just back from Carville, I visited there at the end of last week, and was quite impressed by the service, research, and training that are going on at that center, which has been operating since 1921.

We have a strong commitment to those resident patients of which there are about 180. The problem is, a large expensive facility is about half vacant, and the original proposal was to move the research, training, rehab and acute care to nearby Baton Rouge, about 30 minutes north, but leave long-term care at Carville and contract it out.

Since that time, the Bureau of Prisons has become interested in partial use of the facility. It would be ideal for them, they say, for their long-term care older inmates, perhaps a hundred at the onset.

I must emphasize that this is subject to further discussion and clearance within the Department of Health and Human Services because it's a new proposal from the Department of Justice and Bureau of Prisons to HHS.

This would, if it were approved, however, allow a continuation of employees to take care of the residents and the inmates with a separation, of course, and allow transfer of persons working for the Public Health Service over to working for the Bureau of Prisons.

And I have discussed that with the employee groups. They are comfortable with it. The patients have some concerns, but I think as more information becomes available, they will realize that it meets the commitments to them, and they will come out ahead, as well.

We do have a strong commitment to those patients. They have had a tough life. Many of them are disabled and obviously need to continue there.

Mr. **Natcher**. Dr. Harmon, what are the five-year cost estimates for the Gillis Long facility plan?

Dr. **Harmon**. Well, the plan as amended is being costed out. We would have, during this next fiscal year some extra costs of relocation of the research, training and rehab and acute care to leased space in Baton Rouge.

The cost of that would be between $4,000,000 and $5,000,000. But over five years, after the start-up costs, we would expect decreases in cost for Hanson's care, because of downsizing of the operation in Carville.

[The information follows:]

HANSEN'S DISEASE CENTER

At this time, the five year budget plan for the Hansen's Disease Center at Carville, La., is as follows: FY 1991—$22,601; FY 1992—$23,053; FY 1994—$23,878; and FY 1995—$24,248. However, these figures may change based on discussions with the Bureau of Prisons concerning sharing of the Carville facility.

NATIONAL IMPROVEMENT VACCINE PROGRAM

Mr. NATCHER. Now, Dr. Harmon, at one point last year, the National Improvement Vaccine Program had come to a virtual standstill because of legal disputes concerning HHS's court responsibilities. Has this issue been resolved so that the program can now be resumed?

Dr. HARMON. Mr. Chairman, we have had some partial progress in that area. We have some new rules and regulations which are a positive step toward a less adversarial system, this should not be confused with the fundamental nature of this program which is inherently adversarial, since millions of dollars are at stake and the adjudication resides within a court environment.

We have been meeting with the Department of Justice officials; they have hired five attorneys and are recruiting six more to represent DHHS in this program.

We are working hard to have our own pediatricians and others provide testimony. I think it's headed in the right direction; but the costs are high, and the awards are starting to be a little larger than predicted.

So the cost may be a little ahead of projections.

Mr. NATCHER. How much of the 1990 appropriation for the cost of pre-1989 vaccine compensation claims do you expect to lapse and why?

Dr. HARMON. We are currently assessing the value of a number of claims submitted for payment this fiscal year. At this time it is a little too early to determine the amount we will be required to pay in 1990, and I will probably have to supply that information to the Committee later this fiscal year.

I do believe, though, that the future predictions are going to be sizable.

Dr. Mullan will comment.

Dr. MULLAN. The program is, as Dr. Harmon described, up and running; and we are gaining monthly experience with what this year and the out years will be. I think the proposal that we update you in the near future and regularly would be most useful.

Mr. NATCHER. Mr. Conte, I yield to you.

NATIONAL PRACTITIONER DATA BANK

Mr. CONTE. Thank you, Mr. Chairman.

Doctor, when do we expect the national practitioner data bank to be up and running?

Dr. HARMON. Mr. Conte, The National Practitioners Data Bank is expected to open in the second half of fiscal year 1990. We are making every effort to open the bank as early as possible in that time.

Lots of legal questions are being raised as to confidentiality and disclosure and so forth. But we hope it will be soon.

Mr. **Conte.** I hope you are right. You better get moving on setting this up. It's been on the books now three years. It's received funding for the past two years. The budget that you have before us is now proposing to fund a data bank with user fees; there is no bank.

Where are you going to get the user fees?

Dr. **Harmon.** Again, that is something we are working on. I would defer to my colleague, Dr. Mullan.

Dr. **Mullan.** The data bank is getting close to opening. We are in the latter phase of clearance of the many forms that will solicit the information from the sources around the country that will be entered into the data bank.

The various groups involved from the insurance industry through the hospital sector to the physician community itself, as you can imagine, are very concerned that this get up and running in a way that is acceptable to each of them, and this has proved a laborious and often politically touchy process.

We can say with confidence that we will have it open and running in the second half of this fiscal year. I hope towards the earlier portion of the latter half of this year.

We will, of course, begin to collect user fees at that time. We are presently negotiating what the user fee will be per request.

ONE STOP SHOPPING

Mr. **Conte.** Doctor, the budget includes $25,000,000 for the one-stop shopping initiative that the chairman asked you about within the Child and Maternal Health Block Grant Program.

Can you elaborate on the concept of one-stop shopping and how it's going to work, and how will the communities be chosen to participate?

Dr. **Harmon.** Representative Conte, the one-stop shopping concept goes back a ways, and we have developed some experience in that with previous projects. This represents a major expansion.

During this fiscal year we are doing a couple of demonstration projects at a total cost of $100,000.

A number of states are also in the process of implementing their models, including Florida, Michigan, Utah, Vermont and Washington, and there is also a variety of models around the country in local health departments, hospital based clinics, and some community and migrant health centers.

Perhaps Dr. Whiteside would be able to comment as to how these funds will be awarded, if it happens in 1991.

Mr. **Conte.** And how it works.

Dr. **Whiteside.** Funds will be awarded to a project on a competitive basis, and one of the key factors is going to be for the community to have an infant mortality rate that is higher than the national average.

Now, then, how does it work? It can work in a variety of ways. For example, services can be brought into a single facility, a comprehensive range of services for mothers and children into a single facility. That would be one way it could work.

Another way it could work would be to have a facility in which the eligibility of the mother and the infant could be determined across a broad range of programs, such as the Title V program, medicaid, WIC, so on down the line.

Case management which somebody has mentioned earlier today, can assist those pregnant women through the system of care that may be available in that community so that the needs of a particular mother are identified and met. She is helped through the system to get the kind of services that are needed by that mother.

Mr. CONTE. Okay.

Dr. HARMON. Representative Conte, I think the summary statement would be that these are services that are for the convenience of the patient, not for the convenience of the agencies involved. And I have seen it work well, and I am pleased this kind of expansion is proposed.

COOPERATIVE HHS-HUD INITIATIVE

Mr. CONTE. Okay.

The budget proposes $35,000,000 for cooperative HHS-HUD initiatives; it would reduce the multiple barriers on the underserved communities faced in obtaining basic health care.

Can you share with us how this program would work, how will the communities be chosen, and how will this program be evaluated in terms of its effectiveness on health and social services?

Dr. HARMON. Representative Conte, applicants for these kinds of grants would have to be located in or in close proximity to the public housing projects and provide a full range of health and social services using the one-stop shopping approach, in case management. They would have to agree to eliminate the barriers to care and have convenient hours and provide their care in culturally sensitive ways. They would have to represent the community and have a governing board or similar mechanisms and have to have referral linkages to hospitals and other sites, and have a history of management and fiscal responsibility.

Grantees under this program would be selected and reviewed and evaluated the same way that community and migrant health centers have been.

There is a long track record in that, and I think will serve that program well.

Mr. CONTE. Okay. How are you going to evaluate them?

Dr. HARMON. They would be evaluated in this annual review process, and in competitive re-bidding every three years. Also we contract with independent evaluation firms periodically for the entire program to see if it's meeting its objectives.

MOM VANS

Mr. CONTE. The budget includes $2,000,000 for a one-time grant called MOM vans.

What are MOM vans all about, and who will be eligible for these projects, and how will the vans be distributed, and will we be targeting medically under-serviced populations with these Mom vans?

Dr. HARMON. These vans would be used to transport pregnant women and infants to appointments in community and migrant health centers, eliminating one of the most significant barriers to receiving care.

And I can certainly vouch for that, having been out in the field. There is a very high no-show rate, even for such critical services as prenatal care, up to 50 percent no-show rate; and good transportation will really help.

All of the centers will be eligible for funding, awarded through a competitive process based on criteria related to the problem of infant mortality, and all these centers by definition serve health manpower shortage, medically underserved areas.

PHYSICIAN RECRUITMENT AND RETENTION

Mr. CONTE. You are asking for an additional $9,000,000 to recruit, retain community health centers physicians and improve salaries. There is a very noble thing.

How many physicians will be getting these pay raises, and what plans are in place to improve recruiting the physicians?

Dr. HARMON. Well, about half, or about 1,200 physicians will receive pay raises, if this is approved.

This increase in pay will increase the likelihood the center doctors will be retained; or if they do leave, it will be easier to recruit replacements.

In 1991, there is a request for $64,000,000 for National Health Service Corps recruitment, and $55,000,000 is related to the minority health initiative.

If this is approved, it will support over 900 loan repayment agreements, which can pay for medical replacements, and 400 scholarship awards, which will start serving five to seven years later.

If we can continue that, we might get the Corps up to around 3,000 field assignees, which is far above the current level of about 1900.

NATIONAL HEALTH SERVICE CORPS (NHSC)

Mr. CONTE. That is good.

What are you doing to attract National Health Service Corps doctors?

Dr. HARMON. Again, this previous point is very important, that if we can get the salary up, that will go a long way.

But we also have a number of grants and contracts for advertising, face-to-face meetings and promotion, matching, interviewing and so forth, to make sure the right people get selected in the first place and that the most appropriate site is selected for their match.

COMMUNITY HEALTH CENTERS (CHCS)

Mr. CONTE. Community health centers overall face increasing pressure from AIDS, homelessness, poverty. How will you be able to maintain quality services with a budget that you have before us here today?

Dr. HARMON. I think actually the budget is quite strong in addressing those challenges you mention. There is increased funding for these centers for AIDS and HIV care, to reduce infant mortality, and for homeless grants, as well as other support for provider pay increases.

So I think the budget is quite strong for that program.

Mr. CONTE. My time is up, Mr. Chairman.

Mr. NATCHER. Mr. Stokes, I yield to you.

NATIONAL HEALTH SERVICE CORPS SCHOLARSHIP

Mr. STOKES. Thank you, Mr. Chairman.

Dr. Harmon, I want to share the contents of a letter I received from a young man who wrote to both me and his own congressman, Congressman Mervyn Dymally, and after that I will pose a couple of questions to you.

This young fellow is evidently a young black male. He grew up in the Watts section of Los Angeles, California, graduated from high school in 1978, valedictorian of his class, received a Bachelor of Science at the University of California with honors. He went to Harvard School of Public Health, received a Master's degree, and then in 1987 graduated from Harvard Medical School.

He says he was a recipient of a National Health Service Scholarship during the last three years of medical school.

He states:

> The scholarship was awarded to me with the understanding that I would serve as a physician in a health manpower shortage area.

He then—and I am omitting certain parts of the letter—he says:

> I am thankful for the opportunity this scholarship afforded me. The scholarship made it possible for me to attend Harvard Medical School.

He says:

> I am now resident physician in training in internal medicine, and will complete my current program in June of 1990. At that time I will be required to begin my three-year scholarship repayment in a health manpower shortage area. "Unfortunately the National Health Scholarship Corps will not allow me to serve at the Watts Health Foundation in Compton, California, which was initially on the list of selection sites provided to me by the National Health Scholarship Corps. NHSC has recently scaled down their selection list of sites, which is now limited to a majority of prisons and Indian reservations.
>
> The National Health Scholarship Corps also neglected to list selection-sites within the State of California. I have been in contact with NHSC regional office in San Francisco, and was informed that there were approximately 12 sites in Southern California which, however, would not be added to the list for the year 1990.

He then makes reference to the Watts Health Foundation, which is located in a health manpower shortage area. That community is in need of health professionals who are committed to improving the quality and availability of health care and health education by developing health programs to alter millions of preventable tragic health situations.

Omitting further parts, he later says:

> As mentioned earlier, I have spoken with the regional office of the NHSC in San Francisco, California, but I was informed that Southern California did indeed have health manpower shortage areas. Additionally, I have been accepted by and agreed to join the staff of the Watts Health Foundation beginning July 1990. Unfortunately, NHSC has refused to honor this commitment.
>
> The WHF staff has discussed this matter with the National Health Scholarship Corps without success. I have discussed the matter with NHSC and have been treated inhumanly in return.

He says:

> I am now seeking your support to address the matter of the National Health Scholarship Corps allowing me to serve my three-year obligation at the Watts Health Foundation.

I guess my first question is, is he, in fact, being required to either serve at a prison or on an Indian reservation?

Dr. HARMON. I don't think so. The problem, Representative Stokes, relates to the huge number of needs out there which over all would require about 4,200 physicians to eliminate shortage areas in the United States.

We, of course, don't have that number of physicians available, so we have to prioritize the slots available for a very small number of scholars coming out, scholarship recipients coming out this summer, I believe, is in the neighborhood of 128, 130 or so, of which apparently this physician is one.

He sounds like he has excellent qualifications. But the Watts Clinic is not turning out to be one of the toughest places to fill. There is a large number of physicians in Los Angeles, and there are others who could take his place.

He is needed more elsewhere. Within our high priority list California only has two. Two slots that are the very high priority to fill out of 326 total. So therein lies the problem.

Regarding the prison situation at IHS, I would have to ask Mr. Aspden to comment about those Federal assignments.

Mr. ASPDEN. There are Federal assignments for IHS and prisons, but also on the list of opportunities are enough culturally sensitive sites to provide suitable assignment for anybody of minority background. We have made sure of that.

Mr. STOKES. Well, can I have someone address this specific letter and look into it, and then respond back to me so I can respond to him?

Mr. ASPDEN. I would be glad to, sir.

Dr. HARMON. We regret this kind of situation, Representative Stokes. One solution will be to get the number of scholarship recipients and loan repayment people up to a much bigger number so that there will be a greater selection so people will not have to perhaps go so far from the place they trained to serve.

California has quite a few doctors, and the biggest needs are in more remote places.

Mr. STOKES. I would like to also see a list of sites that are available nationwide, and if this is too long to put into the record, I would just like to have it provided to my office.

Dr. HARMON. We would be happy to do that for you.

[CLERK'S NOTE.—The information was provided to the Committee.]

AIDS PROGRAMS

Mr. STOKES. Now, I note with alarm the Administration's proposal to eliminate a number of AIDS programs within your department. AZT grants, home health service grants, sub-acute care grants, pediatric health care demonstrations would be eliminated.

Did the Department request funds for these programs?

Dr. **Harmon**. I believe we did, but this resulted in some tough decisions. Are you talking about the Department or HRSA?

Mr. **Stokes**. Well, let's start with HRSA.

Dr. **Harmon**. Regarding AIDS, we did ask for drug reimbursement funds, and also for home health services.

But again, tough decisions were necessary, and these did not make it through.

Mr. **Stokes**. Well, when you say, "We asked for . . ." I don't know what you are saying to me.

Dr. **Harmon**. The agency requested funds, but they didn't work their way through the budget process.

Mr. **Stokes**. Did you request the same amount you had last year? What was your request?

Dr. **Harmon**. I believe we requested an increase—Mr. Walsh could comment on some of those details.

Mr. **Walsh**. It was an increase, Mr. Stokes, for the AIDS Drug Reimbursement Program. The home health formula grant was new. There was no prior year request for that.

Mr. **Stokes**. All right. Of the ones that I mentioned to you here, those are the two that you requested funds for, right?

Mr. **Walsh**. Yes, sir.

Mr. **Stokes**. Is that correct?

Mr. **Walsh**. Yes, sir, as well as pediatric aids.

Mr. **Stokes**. Now, do you have any knowledge as to whether the Department made requests of OMB for funds for these programs.

Dr. **Harmon**. No, we don't.

Mr. **Stokes**. Is that information you can get and provide for the record for us?

Dr. **Harmon**. Yes.

Mr. **Stokes**. I would appreciate that. Thank you very much.

Thank you, Mr. Chairman.

[The information follows:]

HRSA AIDS "Who Struck John" Table
(Dollars in thousands)

			1991			
	FY 1989	FY 1990	Request to PHS	Request to HHS	Request to OMB	President's Budget
HRSA AIDS Programs:						
Educ. Training Centers	14,640	14,549	25,000	22,660	22,660	21,000
Community Health Centers	--	10,777	36,000	21,525	13,406	13,323
HIV Health Service Grants	18,596	17,209	35,000	22,926	19,585	11,709
Home Health Care	--	19,737	45,000	--	--	--
Subacute Care	--	1,480	7,500	--	--	--
AIDS Drug Reimbursement	15,000	29,606	30,000	--	--	--
HIV Grants to States	--	--	--	95,000	--	--
Pediatric AIDS Demos	7,806	14,803	20,000	15,000	8,341	14,803
AIDS Facilities Renovation	3,903	4,342	30,000	6,173	4,173	4,129
Oral Health	--	--	1,500	--	--	--
Clinical Care - Model Protocol	--	--	6,000	--	--	--
MH Counseling	--	--	5,500	--	--	--
Subtotal, HRSA AIDS	59,945	112,503	241,500	183,284	68,165	64,964
Other HRSA Programs	1,429,801	1,494,985	1,737,522	1,492,816	1,515,386	1,505,717
Total, HRSA Discretionary	1,489,746	1,607,488	1,979,022	1,676,100	1,583,551	1,570,681

NURSE TRAINING PROGRAM

Mr. **Natcher**. Yes.

Now, Dr. Harmon, you propose to eliminate funding for all but one nurse training program. Does this indicate that the department believes that the nursing crisis has passed?

Dr. **Harmon**. We do not think the nursing crisis is over. There are some recent signs that the shortage may be lessening somewhat.

The supply has been going up, but the demand has also been going up sharply. It's another tough decision.

We feel that the best use of scarce funds in the nursing area should be targeted to increasing opportunities for individuals from disadvantaged backgrounds to pursue a nursing education.

Mr. **Natcher**. What data do you have now concerning the nursing supply and demand?

Dr. **Harmon**. I have some information on that, some recent figures about vacancy rates and so forth. I would ask Dr. Mullan if we can comment.

Mr. **Natcher**. Yes. And in addition to that, Dr. Mullan, when you get the transcript back, put us in some data now that we can use, will you, concerning numbers and demand and so forth?

Go right ahead.

Dr. **Mullan**. Yes, Mr. Chairman, we will.

[The information follows:]

The March 1988 National Sample Survey of Registered Nurses carried out by the Division of Nursing of the Bureau of Health Professions showed that more nurses were employed than ever before, 1.627 million compared to the 1.486 million found in the November 1984 sample survey.

The survey also showed that a higher proportion of all those with licenses to practice as registered nurses were employed in nursing than previously, 80.0 percent in 1988 compared to 78.7 percent in 1984.

The 1988 survey showed that, despite the increases in the overall number of registered nurses, there was no improvement in the number of those with minority backgrounds. Minority employed registered nurses in 1988 numbered about 139,000, about equal to the 140,000 in 1984.

American Hospital Association data show that the number of full-time equivalent (FET) registered nurses employed by hospitals continues to increase and has increased significantly since the Prospective Payment System was initially implemented. In 1988, there were about 771,000 FTE registered nurses employed by community hospitals, or 98 FTE RNs per 100 adjusted average daily patient census. In 1982, the number of FTE registered nurses was about 672,000, or 77 FTE RNs per 100 adjusted average daily patient census.

Data from the American Hospital Association also show that the vacancy rate for registered nurses in hospitals had declined slightly between December of 1987 and 1988, from 11.3 percent to 10.6 percent.

In terms of the availability of a future supply of registered nurses, National League for Nursing data show that first-time enrollments in basic nursing educational programs have reversed their downward trend and shown some increases, rising 4.3 percent to 94.594 new students in the 1987–88 academic year over the total of 90,693 new students in 1986–87. Preliminary data for 1988–89 indicate that first-time enrollments may show some increases for that year as well. However, it is not anticipated that the first-time enrollment levels will reach the high of 123,824 new students experienced in the 1983–84 academic year.

This brief summary of key indicators of what is going on in the nursing area provides an overview of the type of data we are using to monitor the situation.

Dr. **Mullan**. Some of the latest information available suggests that there might be a slight easing of the nursing shortage, at least in some areas.

The vacancy rate for registered nurses in hospitals has declined slightly between December of 1987 to December of 1988, from 11.3 percent to 10.6 percent, according to the latest data available from the American Hospital Association.

The first-time enrollments in basic nursing education programs have shown some increases rising 4.3 percent to 94,594 in the 1987–1988 academic year over the total of 90,693 in the 1986–1987 academic year.

So we think that these are encouraging figures and encouraging trends in nursing, staffing and enrollments in educational institutions.

OFFICE OF RURAL HEALTH POLICY

Mr. **NATCHER**. Your budget, as you know, proposes a $1,000,000 increase for the $3,400,000 Office of Rural Health Policy. Which of its activities would be targeted for this increase?

Dr. **HARMON**. Mr. Chairman, this would go for technical assistance to rural hospitals. They are experiencing severe financial difficulties, and the requested funds would be utilized for the common problems that many rural hospitals are facing.

Mr. **NATCHER**. The budget justification describes a rural health policy program that would use private consultants to respond to the problems of rural hospitals.

Tell us, if you will, a little more about this program and how it would differ from the $18,000,000 rural hospital transition grant program in the Health Care Financing Administration.

Dr. **HARMON**. Mr. Chairman, this request will support technical assistance directed at problems that are common to most rural hospitals rather than the more specific individual problems addressed by the HCFA transition program.

For example, this budget might support the development and dissemination of information on marketing techniques since rural hospitals are seeing their clients often go to urban areas.

The HCFA grant program is currently serving about 180 small rural hospitals to assist them in the financial area. That varies from staff recruitment to purchase of new kinds of equipment.

HEALTH PROFESSIONS PROGRAM

Mr. **NATCHER**. Dr. Harmon, going back just for a moment now to health professions, how serious is the lack of data regarding shortages of various health professions?

Dr. **HARMON**. We really need to work harder on identifying and tracking the graduates and the results of all of our efforts. The need for current health personnel is widespread and pervasive, encompassing most health professions.

There is legislation already on the books calling for data collection and analysis, but in the past, the approach has been dealing with these data problems on an ad hoc, discipline by discipline basis, meeting largely only the most urgent highest priority needs such as for nursing recruitment.

We are developing plans, and we will be working with other Federal programs such as the newly proposed Bureau of Maternal and

Child Health and in the private sector to develop a more comprehensive approach.

MANPOWER SHORTAGES IN HEALTH PROFESSIONS

Mr. **Natcher**. Dr. Harmon, how much would it cost to establish an ongoing reporting system to collect data on manpower shortages in the health professions supported by your agency?

Dr. **Harmon**. It would not be cheap. Let me ask Dr. Mullan.

Mr. **Natcher**. What about it, Dr. Mullan?

Dr. **Mullan**. I don't think we have a precise figure. We have not recommended one in this budget, although our long-term planning and plans, currently under way for future years, involve figures that rank upwards from the levels that we currently have.

I think we would be glad to supply these for you in the future, and discuss them as part of future budget packages, but I concur entirely with Dr. Harmon's assessment that building a floor of data under our health professions' training activity will be very, very important.

If you are making widgets, you wouldn't run a factory without having some assessment of, what the widget population was like out there, and we often tend to go ahead with initiatives in health professions areas without having the kind of data that we need to make intelligent judgments.

MALPRACTICE DATA BANK

Mr. **Natcher**. Your proposal to collect $2,000,000 in user fees for the full cost of the medical malpractice data bank would require authorizing legislation, as you know.

How much could you collect without any change in current law, and would you still establish a user fees system?

Dr. **Harmon**. I would have to ask Dr. Mullan to answer that, Mr. Mr. Chairman.

Mr. **Natcher**. All right. Go ahead, any of you.

Dr. **Mullan**. Mr. Chairman, the current law does allow us a user fee collection for the data bank. It is limited, however, to what are called transaction costs, which are, indeed, very limiting and don't really amortize the full cost of doing business in the data bank.

Our estimate is that we might realize something on the order of $1.50 per transaction, with a million transactions per year, for a figure of $1,500,000, which will not go very far down the road towards meeting the costs of operating the data bank.

AD HOC HOSPITALS

Mr. **Natcher**. Why haven't you requested language to prevent the pro rata reduction for ad hoc hospital grants?

Dr. **Harmon**. Regarding ad hoc hospitals, Mr. Chairman, we do not believe that this approach is an effective or long-term solution to addressing the difficulties that some rural hospitals are experiencing, and we would favor other approaches such as through our Office of Rural Health Policy to address that.

AIDS FACILITY GRANTS

Mr. **Natcher**. Why aren't you requesting extended availability for AIDS facility grants funding as has been done in prior years?

Dr. **Harmon**. I will have to ask staff to comment on that.

Mr. **Natcher**. All right. Go right ahead, any one of you, gentlemen. Go right ahead, Mr. Walsh.

Mr. **Walsh**. If I understand the question, it is why is the request for AIDS facilities' renovation is not multiyear funding.

Mr. **Natcher**. Yes.

Mr. **Walsh**. We believe that a simple error was made in the budget process. We believe the request should say multiyear funding. It always has been in the past.

Mr. **Natcher**. All right. Thank you, Mr. Walsh.

Mr. Conte, I yield to you.

NATIONAL HEALTH SERVICE CORPS

Mr. **Conte**. National Health Service Corps, an important source of doctors in the community health centers, yet we still have a big problem with distribution and retention of physicians in underserved areas.

What is the Corps doing to improve distribution of doctors to place them where they are needed the most?

Dr. **Harmon**. I think the most important thing, Representative Conte, is to get the numbers of physicians and other health professionals available to go into the National Health Service Corps, and as we have discussed here this afternoon, we are proposing a doubling of the field placement.

Mr. **Conte**. How many doctors are available to be placed at a site?

Dr. **Harmon**. Unfortunately, the new doctors coming out of the scholarship program this summer is quite limited, just over a hundred.

Mr. **Conte**. And tell me, Mr. Aspden, how many sites have expressed a need for a doctor?

Mr. **Aspden**. I don't have the number here with me that expresses the need. We have discussed earlier the overall number of physicians needed to designate health care manpower shortage areas. We have, as Dr. Harmon indicated, about 120 obligated doctors available for service this summer. Next year the number is around 70.

Mr. **Conte**. Not tomorrow?

Mr. **Aspden**. No, sir.

Dr. **Harmon**. Also scholarship recipients take years to become available, but the loan repayment recipients are available immediately. They are a little harder to get into the most needy areas, because there is an element of voluntarism. They don't have to go, they need to agree, that is a good thing to do to get their loan repaid and get a subsidy to go into a shortage area.

SCHOLARSHIP PROGRAM

Mr. **Conte**. You requested $55,000,000 to recruit minority students into the scholarship program. How many scholarships will be funded with $55,000,000?

Dr. **Harmon**. We estimate that around 400; is that right, the scholarships could be funded?

Mr. **Aspden**. Yes.

Dr. **Harmon**. And that has to be an investment for over two years each, to make sure the money is available, and then an even greater number of loan repayment recipients could be funded with that amount.

Mr. **Conte**. Will they have the same opportunities for placement as the current scholarship recipients?

Dr. **Harmon**. I believe they will. Mr. Aspden could comment.

Mr. **Aspden**. Well, the places that we allow obligated doctors to go vary from year to year, so the scholars entering the program now obviously wouldn't, because most of them wouldn't be available, as Dr. Harmon indicated, until five to seven years from now.

ORGAN TRANSPLANTATION

Mr. **Conte**. How many transplants were facilitated by the National Procurement in Transplantation Network this past year?

Dr. **Harmon**. I will ask Dr. Whiteside to address this question.

Dr. **Whiteside**. There were over 9000 kidney transplants, somewhere in the neighborhood of 1600 heart transplants, 1600 liver transplants that have been assisted in the past year through the Organ Procurement Transplantation Network.

Mr. **Conte**. Put that in the record, too, each transplant—the number of transplants in each category.

Dr. **Whiteside**. Yes, sir.

[The information follows:]

ORGAN TRANSPLANTATION ACTIVITY (1982-1989)

Organ	1982	1983	1984	1985	1986	1987	1988*	CUM'L	# Waiting* (1/90)
KIDNEY	5,358	6,112	6,968	7,695	8,976	8,967	9,123	53,199	16,303
Cadaver	(3,681)	(4,328)	(5,264)	(5,819)	(7,089)	(7,060)	(7,278)	(40,519)	na
Living	(1,677)	(1,784)	(1,704)	(1,876)	(1,887)	(1,907)	(1,845)	(12,680)	na
HEART	103	172	373	731	1,368	1,438	1,647	5,832	1,360
HEART-LUNG	7	20	22	30	45	41	74	239	244
LIVER	62	164	308	602	924	1,199	1,680	4,939	834
PANCREAS	35	61	52	130	140	142	243	803	307
BONE MARROW	--	--	--	--	1,578	1,659	na	3,237	na

Source:

1982-86: - National Center for Health Services Research
OHTA Transplantation Activity Summary, 1986
- United Network for Organ Sharing, July 1987
- Div of Organ Transplantation/OSP/BMCHRD
1987- : United Network for Organ Sharing (UNOS)
** : Reported by UNOS as of Jan 15, 1990)*

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Mr. Conte. Let's discuss the bone marrow registry, the one over at NIH. Since it takes over 20,000 people to be tested to find a match, much time and effort is expended to save lives.

With your agency's experience in transplant facilitation, are you working with NIH to trade ideas and to improve the bone marrow transplantation registry?

Dr. Whiteside. We are in frequent communication with the people at NIH about the bone marrow transplant registry, because we get many requests for information about that registry. So we are working back and forth and exchanging information with NIH.

NIH is particularly helpful to us in putting together one of the annual reports that we have to do on organ transplantation.

SUBSTANCE ABUSE

Mr. Conte. All right.

Can you share with us what your agency is doing to combat substance abuse?

Dr. Harmon. Representative Conte, we are working with ADAMHA, the Alcohol, Drug and Mental Health Administration, in a joint project where they have transferred about $9,000,000 in funds to HRSA. Through a competitive process, we have made awards that would bring substance abuse treatment into primary care clinics. And I am trying to remember the number of awards that have gone out, I believe they are gone to a variety of recipients, 25.

Mr. Aspden. Twenty-one.

Dr. Harmon. Twenty-one recipients all over the country, and nine are community health centers, and the rest are state and local health departments, academic institutions and others.

We have a long way to go on this. These kinds of programs tend to be a little bit categorical and not as much collated as we would like to see. That is why these projects are needed.

Mr. Conte. How about Bennett's office? Are you doing anything with Bennett's office?

Dr. Harmon. I am not sure.

Mr. Aspden, are you aware of linkages there, or anybody else?

Mr. Aspden. No. We provide input in our program plans and our priority into the overall Federal drug initiative. We don't work directly with Mr. Bennett's office, no.

Dr. Harmon. We provide our input through the Office of the Assistant Secretary for Health and then on over to Mr. Bennett.

I believe there are closer linkages with ADAMHA where there is a large amount of this kind of thing going on.

FACILITIES FOR AIDS PATIENT

Mr. Conte. Have you got funds in there for facilities for AIDS patients? Has the demand for this program been growing and what type of projects are being funding?

Dr. Harmon. I would like Dr. Whiteside to comment.

Dr. Whiteside. These funds are used for the construction, alteration or renovation of subacute care facilities for AIDS patients, for long-term care facilities for AIDS patients, for hospice care, for residential care in some instances where health care can also be given to these patients.

Those are the kinds of activities that are supported.

Mr. **Conte**. How do you select them?

Dr. **Whiteside**. We look at the need that is identified within the community for caring for these patients; we look at the feasibility of the project, and we look at the cost and the non-Federal participation that will be provided by the grantee.

Our experience has been that, in general, every one Federal dollar will generate four non-Federal dollars in the construction program.

HOMELESS PROGRAM

Mr. **Conte**. Your budget requested $34,000,000 in new budget authority for a total of $40,000,000 for health care for the homeless.

Are there any studies which itemize what major illnesses the homeless suffer from?

Dr. **Harmon**. Representative Conte, a number of studies are being done. The Robert Wood Johnson Foundation helped to start this off by their grant program. And the Federal Government has provided this funding you are referring to, which has helped to continue this. We are seeing significant rates of disease and injury in this population, and the projects we fund are comprehensive primary care providers, and so they are taking care of these type of many different needs.

We are, of course, alarmed by the number of children that we are seeing that are homeless and the kind of challenges that go along with that.

Mr. **Conte**. What role are the community health centers taking in helping the homeless?

Dr. **Harmon**. Well, CHCs, are important recipients of homeless health care grants. There are about 92 at this time, and Mr. Aspden could comment as to how many are CHCs.

Mr. **Aspden**. About half are federal CHCs, half are local coalitions or local community-based health departments.

Mr. **Conte**. Has anybody looked at the homeless? There are different types of homeless. Is there anybody looking into that problem?

Dr. **Harmon**. Yes, they certainly are, and some of these people are mentally ill, and in the past, perhaps were committed to inpatient care, and that is no longer the case. Some have substance abuse problems. These are impaired individuals.

There is a certain percentage of these individuals who are able to work, and those are some of the success stories.

The women and children homeless, a lot is being done for them. There is no easy answer, though, to the homeless mentally ill. And a short term shelter is only a temporary answer, obviously. We need some kind of longer range answer, and we have a number of task forces in the Administration working on this, on the health care and some of the broader issues.

I believe we have a more recently high level task force working even harder on the homeless issue.

Mr. **Conte**. Is that coming out of your shop?

Dr. **Harmon**. Well, we do the homeless health care delivery, but it involves other parts of HHS and HUD as well. Of course, housing is one of the biggest challenges by definition. These people need housing as a top priority.

Mr. **Conte**. In the old days when we were kids growing up, there was no such thing as homeless people. We had what they used to call the poor farm in my home town and it was out in the country. And they had cattle and they had chickens. They had beautiful vegetable gardens, and they were good, strong, healthy people. They would go up there and they would have doctors go up there and visit them, nurses at the farm.

Everybody worked hard all day long, ate a good, three square meals a day, went to bed early at night.

Dr. **Harmon**. Well, for a segment of the homeless population, that kind of program can work.

Mr. **Conte**. Not every one, I realize that.

Dr. **Harmon**. Back then, I guess a lot of the chronically and mentally ill were committed to institutions, but some of those have been deinstitutionalized and with increased rights and so forth they have a right to be out on the streets. But they still have a need for housing and medical care and so forth. And trying to match that up is a real challenge.

NURSING ISSUES

Mr. **Conte**. Boy, I tell you, that is a hell of a right, I will tell you, to be out there like an animal. It is sad. It is a tough, tough—these are tough, tough issues.

Nurses' salaries, I know you answered some questions of the Chairman, but are they getting to where they should be?

Dr. **Harmon**. It is my understanding that nursing pay is getting better. I believe it still has a way to go. But I think hospitals and other major providers are just through the need and the demand for increasing pay. And I have heard anecdotal stories of some nurses working very long hours, making $50,000, $60,000 a year. Perhaps Dr. Mullan has some figures.

By the way, we have just obtained approval to continue the Nursing Commission to continue gathering data and working on the implementation of the previous Commission's recommendations.

Dr. **Mullan**. Mr. Conte, we have a soon to be appointed new formally approved national commission on the nursing shortage, which will sit for approximately a year, and this will be one aspect that they are looking at.

A circumstance which has been revealed by the previous commission and previous studies has been that nurses today are being used much more frequently for other kinds of hospital and health related activities, so that the drain on the nursing pool for activities that traditionally were not nursing, has increased considerably, leaving less nurses available for traditional nursing bedside and the like activities.

NURSING SCHOLARSHIPS

Mr. **Conte**. How many undergraduate nursing scholarships will be awarded through your agency for the current fiscal year 1990?

Dr. **Harmon**. I will have to see if we have that information, Representative Conte.

Dr. **Mullan**. The figure is 725.

Mr. **Conte**. What can we do to encourage more nurses to practice in rural and medically underserviced areas?

Dr. **Harmon**. One thing we can do is to expand, again, National Health Service Corp scholarship opportunities. We also are working on a loan repayment approach for nurses.

It doesn't work quite as well with as with physicians because the amount of debt is not so large and the incentive is not so strong to go after the loan repayment as incentives. Plus some private hospitals and public hospitals are already doing that, and their competition is even stiffer. They are willing to pay big bonuses, perhaps more than our rural programs can afford.

HEAL LOANS

Mr. **Conte**. Doctor, your budget documents state that the defaulted HEAL loans will total $44,600,000. This is a tremendous jump from $26,600,000 for 1990, and—for fiscal year 1990, and $9,000,000 for fiscal year 1989. Instead of calling them HEAL loans, you ought to call them steal loans. Are the default rates going up by leaps and bounds?

Dr. **Harmon**. We agree this is a problem. The HEAL loans have a pretty high interest rate, so the burden on the recipients, many of whom are from low income minority backgrounds, are considerable. Therefore, given all these problems, we have recommended a phasing down of this program in favor of other programs that we think are more successful.

Dr. Mullan may have some additional comments.

Dr. **Mullan**. The default rate, Mr. Conte, actually is not increasing nor do we expect rates to decline. Typically loans are defaulted during the four years of Medical school, three years as an intern/resident, plus nine months of grace. We are seeing the results now as more, borrowers begin entering repayment states. With increasing loans in repayment states even a stable default rate will result in a significant reverse in the level of claims.

The default rate is approximately eight percent. The bleeding that will go on from this program runs out in front of us for many years to come, and we think it is a very inefficient and obviously expensive way to finance a health professions education, which is why we are recommending terminating new loans starting now, so that we begin to extricate ourselves from the program.

Mr. **Conte**. Can you put in which schools and which professions have the highest default rate?

Dr. **Mullan**. We can, indeed. For the record, the chiropractic profession has shown the highest rate of default.

[The information follows:]

The nine HEAL schools with default rates greater than 20% as of September 30, 1989 are listed below: Only schools with more than 25 loans are included.

School	Dollar rates (percent)	Borrower default rate
Meharry Medical College—Dental	32.3	31.4
U. of California/San Francisco—Dental	30.1	29.2
Xavier University of Louisiana—Pharmacy	28.0	25.0
Tuskegee University—Veterinary	23.6	19.9
University of Oklahoma—Public Health	22.1	20.7
Howard University—Dental	21.9	22.4
Maharry Medical College—Medicine	21.8	20.9
Boston University—Public Health	21.4	19.6
Creighton University—Pharmacy	20.4	21.7

As of September 30, 1989, the health professions default rates in the HEAL program are shown below:

Profession	Dollar default rate percent	Borrower default rate
Chiropractic	12.1	11.5
Podiatry	10.4	10.0
Dentistry	8.2	7.3
Medicine	4.7	4.1
Osteopathy	3.6	3.3
Other	6.6	6.1
Overall	6.5	6.0

Notes.—These default rates include principal only, and are expressed as a percentage of loans in repayment. If interest were to be included, the figure is slightly higher, at 8.2 percent overall. Chiropractic, podiatry, dentistry, medicine, osteopathy are the five health professions borrows with the largest amount of loans (dollars).

Mr. CONTE. What do you know about that, Doctor? Can you bring us the research priorities have been established for the rural health policy research centers. You can put that in the record and will the research centers be looking at health professional staffing. Put that in the record.

Thank you very much, Dr. Harmon.

[The information follows:]

Yes, 13 research priorities have been established for the Rural Health Policy Research Centers:

(1) Promoting the viability of small rural hospitals that are critical in providing access to care in rural areas.

(2) Promoting access to primary care for residents in rural areas.

(3) Promoting fair Medicare payment policies for rural hospitals and providers.

(4) Promoting resolution of agricultural health and safety problems in rural areas.

(5) Promoting improved care for rural blacks and Hispanics and other racial and cultural minorities.

(6) Promoting improved access care for the uninsured, the underinsured, and Medicaid and Medicare beneficiaries.

(7) Working to reduce infant mortality in underserved areas.

(8) Minimizing the effects of medical liability and malpractice in rural areas, particularly upon obstetrical practices.

(9) Devising strategies for better training recruitment of nurses in rural communities.

(10) Divising strategies for better training and recuritment of nurses in rural communities.

(11) Promoting increased utilization of physician assistant and nurse practitioners in rural areas.

(12) Resolving mental health system problems in rural areas.

(13) Developing strategies to improve the delivery of care in rural areas (e.g. development of new models of rural health care, diversification, linkages and multihosptial systems.)

Dr. HARMON. Thank you, Representative Conte.

Mr. **Natcher.** Dr. Harmon, we want to thank you and your associates for appearing before our committee at this time on behalf of your budget request for the fiscal year 1991 for Health Resources and Service Administration. It has been a good hearing, Dr. Harmon.

Thank you very much.

Dr. **Harmon.** Thank you, Mr. Chairman.

Mr. **Natcher.** The committee will now adjourn until two o'clock, Monday afternoon.

[The following questions were submitted to be answered to the record:]

Questions Submitted by the Subcommittee

AIDS

Mr. Natcher: Is it common for private insurers to cover the cost of AZT for preventive, as well as therapeutic, purposes?

Dr. Harmon: Shortly after clinical trials for AZT indicated that the drug may be useful for preventive as well as therapeutic purposes, the Health Insurance Association of America (HIAA) surveyed the major commercial health insurance firms to determine if they would be covering the prophylactic, or preventive, use of AZT. All of the major firms indicated that the prophylactic use of AZT would be covered even before drug labeling changes were made. Now that AZT has been relabeled for prophylactic use, the HIAA estimates that virtually all commercial health insurance firms cover its use for prophylaxis.

HEAL LOANS

Mr. Natcher: If there were no limit on borrowing authority, what would be the market demand for HEAL loans in 1991?

Dr. Harmon: With no limit on borrowing authority, the estimated demand for HEAL loans would be approximately $270 million in FY 1991.

Mr. Natcher: You propose to use unobligated balances throughout the Public Health Service to finance HEAL defaults. What is your estimate of the unobligated balances likely to be available?

Dr. Harmon: Current estimates to the SLIF will not require the use of PHS unobligated balances to maintain solvency. We are, however, proposing to transfer $15 million from HPSL/NSL returned funds into the HEAL/SLIF account.

HEALTH PROFESSIONS

Mr. Natcher: What sort of response do you anticipate to the new undergraduate nursing scholarship program?

Dr. Harmon: In FY 1990 we plan to award $3.3 million to support 750 scholarships. In FY 1989 we awarded $1.3 million which supported 407 scholarships. The scholarships range from $201 to $13,176. Each recipient incurs a minimum two-year obligation.

VACCINE COMPENSATION

Mr. Natcher: How much of the 1990 appropriation for the costs of pre-1989 vaccine compensation claims do you expect to lapse and why?

Dr. Harmon: We expect to fully obligate the FY 1990 appropriation of $74.5 million. As of March 5, 1990, 51 claims received judgments for compensation by the U.S. Claims Court for a total award of $24.2 million.

Mr. Natcher: What is the average time lag in filing pre-1989 vaccine compensation claims? When do you expect the last of the pre-1989 claims to be filed?

Dr. Harmon: The statute differentiates between petitioners whose injuries were sustained prior to October 1, 1988 and those sustained after that date. Furthermore, the law established a statute of limitations (October 1, 1990) on filings for pre-October 1988 claims of two years from the initial date of the Act. All retrospective claims must be filed before October 1, 1990. Since the court must process all cases within 420 days exclusive of suspensions, assuming no extension of the statute of limitations, it is anticipated that all retrospective claims will have been awarded by the end of FY 1993.

MISCELLANEOUS

Mr. Natcher: Why is there a need for an appropriation for the Medical Facilities Loan Fund if receipts and unobligated balances are projected to exceed obligations in 1991?

Dr. Harmon: The Medical Facilities Guarantee and Loan Fund does not contain a surplus. The unobligated balance at the start and end of the year, reflected in the President's Budget Request, represents monies available in the default fund established by Congress for loan default payments. These amounts are available only for contingency situations to protect the large portfolio of outstanding loans approximately $600 million in case of default. Therefore, these amounts are not available for payment of interest subsidies and have no bearing on the $20.0 million Interest Subsidy Request.

Mr. Natcher: Which specific activities would be reduced as a result of your proposal to decrease funding for the organ transplantation program?

Dr. Harmon: The Administration's budget request for activities of the Division of Organ Transplantation are being reduced by $691,000 in order to eliminate grants to organ procurement organizations (OPOs).

There are two primary reasons for the reduction: (1) The Department believes that this program is not necessary because HCFA already provides core support for the existing 72 OPOs. Activities of the OPOs are reimbursed under the end-stage renal disease program, so that virtually all activities supported by HRSA grants are also allowable costs reimbursed by Medicare. (2) The original intention of the legislation, i.e., establishment and consolidation of OPOs has been realized, and there may be little, if any, need for establishment of OPOs. Even still, if new OPOs are established or existing OPOs expand or consolidate, these costs are reimbursable under Medicare as well.

Mr. Natcher: Why were you permitted to budget for the full cost of the 1991 payraise rather than absorb 50 percent, as is standard throughout the Department?

Dr. Harmon: HRSA was permitted to budget for the full cost of the FY 1991 payraise because the agency would have been unable to pay mandatory administrative and personnel costs associated with its program activities had it been required to absorb 50 percent of the cost of the payraise.

Mr. Natcher: Has there been any change in the number of designated health manpower shortage areas?

Dr. Harmon: There has been no significant change in the number of Health Manpower Shortage Areas (HMSA). Based on the data available as of June 30, 1989, there are 1,955 primary care HMSA. As of December 1988 there were 1,944.

Mr. Natcher: How many AIDS patients are treated at community health centers?

Dr. Harmon: We have no firm data on that, but we estimate that between two and three percent of the C/MHC service population would test seropositive for the AIDS virus.

Mr. Natcher: What is the estimated volume of new borrowing in the HEAL program in 1990?

Dr. Harmon: Of the estimated $250 million in disbursements for FY 1990, it is expected that approximately 30 percent or $75 million will be to first-time borrowers.

Mr. Natcher: How much Community Health Center funding goes to migrant health centers?

Dr. Harmon: Approximately 80 community health centers are recipients of both Sec. 329 and 330 funding. This dual funding is the result of such centers being located in areas where they serve a resident underserved population and a migrant population as well. An additional 25 migrant health centers receive only Sec. 329 funding. The 1991 budget requests $438.3 million for community health centers and $48.4 million for migrant health centers.

Mr. Natcher: How do you plan to allocate 1990 allied health training funds among the many allied health professions? Are you reserving particular amounts for certain groups, or will you run one consolidated competition?

Dr. Harmon: For FY 1990, approximately $700,000 has been appropriated for Allied Health Special Projects (AHSP) for the purpose of improving and expanding program enrollments, promoting effectiveness through interdisciplinary training programs, emphasizing innovative models to link clinical practice and education, adding and strengthening curriculum, and the recruitment of individuals into the allied health professions.

The newly created Model Education Projects, which are for diverse investigator-initiated model projects pertaining to such topics as educational outcomes, development of new clinical training sites, faculty development, teaching techniques, cross-discipline curriculum development, and information science will be eligible for funding under AHSP. There has been considerable interest in this program on the part of health professions schools and associations, and it is anticipated that there will be a significant number of applications for funding under this authority.

The purpose of another program, Interdisciplinary Training for Health Care in Rural Areas, is to provide support for the education and training of health care professionals including allied health personnel to encourage and prepare them to enter into and/or remain in practice in rural America.

Mr. Natcher: How do you plan to allocate the funds for nursing loan repayment for shortage area service between the two programs authorized in sections 714 and 716 of P.L. 100-607?

Dr. Harmon: The Health Omnibus Program Extension of 1988, P.L. 100-607, Sections 714 & 716, added Section 847 the Nursing Demonstration Authority, but no specific funds were allocated for its implementation in the fiscal 1990 appropriation. Subsequently, we have learned that Congress intended that a portion of the FY 1990 appropriation for $1 million for the Nursing Loan Repayment authority (Section 836) be used to initiate the Nursing Loan Demonstration authority (Section 847).

We are requesting that the newly established nursing commission explore a strategy for implementing the Nursing Loan Demonstration authority as well as other innovative mechanisms for providing financial assistance to students in exchange for a practice commitment.

Mr. Natcher: We have heard criticism of a State health manpower survey that you are presently conducting because you are not using one standard questionnaire for all States. How do you respond to this criticism?

Dr. Harmon: The Health Professions Reauthorization Act of 1988, enacted November 4, 1988, requires the Secretary of Health and Human Services to contact the Chief Executive of each State, District, Commonwealth and Territory, in order to obtain their assessment of health care personnel shortages. The primary goal of the project is to obtain responses reflecting State concerns. Towards this end, the Assistant Secretary for Health sent out an identical letter to the Governor of each State, District, Commonwealth, and Territory in September 1989. This letter requested information pertaining to health manpower issues and related concerns within each State.

The use of a rigid and highly structured survey form was rejected for a number of reasons, among which is the need for a timely response. In the 1960s, and 1970s, the Public Health Service was involved in supporting States in the development of a capacity to collect and analyze data on health personnel. This experience convinced us that the imposition of such a structured survey form upon the States would not only delay responses significantly, but would result in the loss of important insights and information, such as the States have now provided to us. In addition, experience had shown that States differ significantly in the availability of manpower data, and the approach taken could allow for flexibility in responding.

Responses to the September 1989 letter to the Governors have been quite positive. Each response has been reviewed and analyzed in-house, based upon uniform criteria and the responses summarized in identical formats. Further standardization would lead to the loss of significant information, which would work contrary to the objectives of this Congressional Mandate. A contract is being let for further analysis and categorization of the responses, and an interim report will be developed later this year.

AIDS

Mr. Natcher: Describe the formula used to allocate AZT funds to the States, the eligibility guidelines established by the States, the number of beneficiaries served by each States, and State drawdowns of funds made available to date.

Dr. Harmon: Under the AIDS Drug Reimbursement Program, funds have been allocated to States on the basis of their number of reported AIDS cases during the previous two years. State eligibility guidelines vary widely (e.g., from $4,358 in Georgia to $44,000 in New York) but generally center around 150 percent to 200 percent of the Federal Poverty Income Guideline for a family of one, $5,980 as of February 16, 1989. States may also use sliding income scales and copayments provisions. Recent site visits to the eleven States that have received 85 percent of the AIDS Drug Reimbursement funding showed that approximately 15,300 people were served in those States through FY 1989. Reports from all States indicate that approximately 18,000 people have benefitted from this program as of the end of FY 1989. The actual amount of individual State drawdowns is not easily determined since the Department-wide payment systems maintains a general account of grants to States from all sources (the MCH Block Grants are an exception). State drawdowns are not generally associated directly with a specific grant. However, during the course of each funding period, all States are contacted to determine their anticipated surpluses or deficits at the end of the funding cycle. In the first two funding periods, the total of anticipated State deficits exceeded the amount of surplus monies expected to be available. During each funding cycle, program monies were redistributed on the basis of these State estimates. We expected to repeat this process for FY 1990.

NHSC SCHOLARSHIPS

Mr. Natcher: What is the "default rate" for National Health Service Corps scholarships in terms of the number of obligors who fail to meet their service requirement and pay a financial penalty instead? What is the rate of "defaulters" who do not meet the financial penalty?

Dr. Harmon: As of last March, over 96 percent of scholarship recipients had fulfilled their obligation either through service or financial payback. Of the total scholarship recipients, 13 percent elected to fulfill their obligation through financial payback.

Mr. Natcher: What is the default rate (expressed in both percentage of dollars and percentage of loans) for HEAL, HPSL, NSL and Medical Facilities loans?

Dr. Harmon: For HEAL, the borrower default rate as of September 30, 1989 was 6.0 percent. Expressed as a percentage of dollars, the default rate for HEAL as of September 30, 1989 was 6.5 percent. For HPSL and NSL the dollar rates as of June 30, 1989 were 2.1 percent and 2.4 percent respectively. Default rates as a percentage of loans or borrowers are not computed for HPSL and NSL.

Mr. Natcher: List the locations of the hospitals receiving ad hoc grants in 1989 and 1990, and the total funding received by each.

Dr. Harmon: The following are the locations of the hospitals receiving ad hoc grants in FY 1989 and 1990.

	1989	1990
Talladega County, Alabama (2 hospitals)	$500	$494
Logan County, Illinois	$650	$642
Edgefield County, South Carolina	$210	$207
	$1,360	$1,343

Mr. Natcher: List all grantees of the AIDS adult health services demonstration program since its inception, indicating their grant award for each year and which grants will be up for recompetition in 1991.

Dr. Harmon: The listing of the current twenty-five HIV Services Demonstration grantees follows as requested. In FY 1991, $11,709,000 would be used for non-competing grants to seven of these projects. The grantees that will have to recompete for the remaining funds, $7,715,000, will not be known until after the FY 1990 grant cycle is complete. We expect to make between nine and eleven competitive grant awards.

HIV/AIDS SERVICE DEMONSTRATION PROJECT GRANTS (by GRANTEES) - FY 1986 to FY 1991

March 23, 1990

GRANTEE	CITY	FY 1986 Actual	FY 1987 Actual	FY 1988 Actual	FY 1989 Actual	TOTAL FY 1986-89	FY 1990 Estimate	FY 1991 Estimate
Health Research Inc & NY State Dept of Health	New York,NY	8,147,059	375,000	—	2,908,823	11,430,882	3,975,350	3,975,350
San Francisco Dept. of Public Health	San Francisco,CA	3,197,114	1,000,000	294,600	1,427,846	5,919,560	1,812,266	2,251,603
Los Angeles County Dept. of Health Services	Los Angeles,CA	2,567,121	400,000	744,600	2,000,000	5,711,721	—	—
Public Health Trust of Dade County (Miami)	Miami, FL	1,360,706	530,917	385,287	1,067,288	3,344,198	901,656	983,625
Seattle-King County Dept. of Health	Seattle,WA	—	1,200,000	644,699	—	1,844,699	—	—
Public Health Trust of Dade County	Ft. Lauderdale,FL	—	1,200,000	—	150,000	1,350,000	—	—
Fenway Community Health Center	Boston,MA	—	1,061,648	—	105,672	1,167,320	—	—
San Diego County Dept. of Health Services	San Diego,CA	—	1,026,985	444,600	141,684	1,613,269	—	—
District of Columbia Dept. of Human Services	Washington,DC	—	976,985	799,664	35,931	1,812,580	—	—
AID Atlanta	Atlanta,GA	—	950,000	148,750	—	1,098,750	—	—
Comprehensive AIDS Prog. of Palm Beach County	Palm Beach FL	—	878,465	—	65,000	943,465	—	—
Orange County Health Care Agency	Santa Ana,CA	—	200,000	1,082,300	179,908	1,462,208	—	—
New Jersey Dept. of Health (Trenton)	Newark, NJ	—	200,000	800,000	—	1,000,000	—	—
Associated Catholic Charities of New Orleans	New Orleans.LA	—	—	1,499,561	63,000	1,562,561	—	—
Maricopa County Department of Public Health	Phoenix,AZ	—	—	1,238,765	—	1,238,765	—	—
Philadelphia Health Management Corporation	Philadelphia,PA	—	—	1,106,067	—	1,106,067	—	—
AIDS Foundation of Chicago	Chicago,IL	—	—	1,076,424	156,660	1,233,084	—	—
AIDS ARMS Network, Inc.(as of 2/90)	Dallas,TX	—	—	857,289	460,000	1,317,289	—	—
Nassau-Suffolk Health Systems Agency	Plainview, NY	—	—	844,960	—	844,960	—	—
Puerto Rico Department of Health	San Juan,PR	—	—	648,600	*(A)*	648,600	297,947 *A/*	—
Harris County Hospital District	Houston, TX	—	—	348,187	1,114,207	1,462,394	1,149,294	—
Department of Health & Mental Hygiene	Baltimore,MD	—	—	—	972,768	972,768	1,167,321	1,167,321 •
United Community Services of Metro Detroit	Detroit,MI	—	—	—	906,387	906,387	1,087,664	1,305,196
City & County of Denver	Denver,CO	—	—	—	859,403	859,403	1,031,283	1,031,283
County of Hudson	Jersey City,NJ	—	—	—	829,335	829,335	994,800	994,800
	TOTALS:	$15,272,000	$10,000,000	$12,964,353	$13,443,912	$51,680,265	$12,417,581	$11,709,178

A) No-cost extension in FY 1989, supplemental grant in FY 1990.
Must compete for any additional FY 1990 funding.

Mr. Natcher: Provide the "waterfall" table of National Health Service Corps staffing levels under the President's budget for 1985-1995.

Dr. Harmon: The table will be furnished to the Committee.

Mr. Natcher: Does your request include any funding for the Council on Graduate Medical Education?

Dr. Harmon: No funds are included specifically for Council on Graduate Medical Education. However, this activity will continue to be supported with program management dollars.

Mr. Natcher: What size Federal appropriation would be required in future years to support a National Health Service Corps field strength of 3,000, including both recruitment and field costs? If a precise figure is not available, provide your best estimate.

Dr. Harmon: The 1991 request for the field budget is $42.4 million. An increase of approximately $29.2 million in 1991 dollars would be required to support a field strength of 3,000. The increase would include a $25 million increase to support a Federally salaried field strength of 600, $2.6 million for increased travel and transportation expense, and $1.6 million for the increase in clinical and professional support.

28-Jan-90

NATIONAL HEALTH SERVICE CORPS WATERFALL TABLE

1991 President's Budget

	1987 ACTUAL	1988 ACTUAL	1989 ACTUAL	1990 PROJECT	1991 PROJECT	1992 PROJECT	1993 PROJECT	1994 PROJECT	1995 PROJECT
FEDERALLY SALARIED FIELD STRENGTH									
1. On duty start-of-year...............	456	366	322	278	383	490	594	624	627
2. Estimated losses from NHSC sites....	-162	-79	-129	-25	-20	-20	-50	-75	-75
3. Estimated net losses to PPO/PPA/PPS....................	-6	-3	0	0	0	0	0	0	0
4. NHSC new scholarships...............	78	38	21	10	7	4	5	3	3
5. From loan repayment.................	---	---	6	25	25	25	25	25	25
6. Volunteers..........................	---	---	58	95	95	95	50	50	50
8. From other sources..................	0	0	0	0	0	0	0	0	0
EOY Field Strength..................	366	322	278	383	490	594	624	627	630
PRIVATE PRACTICE OPTION FIELD STAFF									
1. On duty start-of-year...............	429	317	198	96	52	46	35	42	53
2. Estimated losses....................	-138	-125	-104	-47	-18	-22	-4	0	0
3. NHSC new scholarships...............	25	5	2	3	2	1	1	1	1
4. From loan repayment.................	---	---	0	0	10	10	10	10	10
4. From NHSC conversion................	1	1	0	0	0	0	0	0	0
5. Volunteers..........................	---	---	0	0	0	0	0	0	0
6. EOY PPO Field Strength..............	317	198	96	52	46	35	42	53	64
PRI. PLACEMENT (SALARIED) FIELD STAFF									
1. On duty start-of-year...............	731	602	473	353	102	88	36	14	7
2. Estimated losses....................	-321	-195	-150	-253	-17	-55	-25	-10	-6
3. NHSC new scholarships...............	190	64	30	2	1	1	1	1	1
4. From loan repayment.................	---	---	0	0	2	2	2	2	2
5. From NHSC conversion................	2	2	0	0	0	0	0	0	0
6. Volunteers	---	---	0	0	0	0	0	0	0
EOY PPS Field Strength..............	602	473	353	102	88	36	14	7	4
PRIVATE PLACEMENT (330) FIELD STAFF									
1. On duty start-of-year...............	1,511	1,457	1,123	1,221	1,216	1,592	1,946	2,371	2,750
2. Estimated losses....................	-417	-442	-458	-508	-398	-393	-322	-318	-314
4. From Scolarships....................	360	108	99	118	50	35	41	26	26
4. From loan repayment.................	0	0	106	35	374	337	306	270	256
5. From NHSC Conversion................	3	0	0	0	0	0	0	0	0
6. Volunteers..........................	0	0	219	350	350	375	400	400	400
7. Amnesty	0	0	133	0	0	0	0	0	0
EOY PPA Field Strength..............	1,457	1,123	1,221	1,216	1,592	1,946	2,371	2,750	3,124
Federally employed field staff.........	366	322	278	383	490	594	624	627	630
Private practice option................	317	198	96	52	46	35	42	53	64
Private placement.(salaried)...........	602	473	353	102	88	36	14	7	4
Private placement.(grant-supported)....	1,457	1,123	1,221	1,216	1,592	1,946	2,371	2,750	3,124
Combined EOY Field strengths...........	2,742	2,116	1,948	1,751	2,216	2,611	3,051	3,445	3,822

NHSC Waterfall Table Cont'd

	1987 ACTUAL	1988 ACTUAL	1989 ACTUAL	1990 PROJECT	1991 PROJECT	1992 PROJECT	1993 PROJECT	1994 PROJECT	1995 PROJECT
To NHSC Federal........................	70	38	85	130	127	124	80	78	78
To private practice option.............	28	5	2	3	12	11	11	11	11
To private placement.(salaried)........	192	66	30	2	3	3	3	3	3
Private placement.(grant-supported)....	363	109	558	501	774	747	747	703	680
To IHS/BOP.............................	154	115	160	135	~120	115	115	115	115
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Total..................................	813	333	833	771	1,036	1,000	956	910	887
Source of Assignees:									
NHSC Scholarship Pipeline..............			151	131	60	41	48	29	29
Amnesty Obligors.......................			133	0	0	0	0	0	0
Federal Loan Repayment Obligors			112	60	411	374	343	316	293
Conversion From Federally Salary.......			0	0	0	0	0	0	0
Volunteers.............................			277	445	445	470	450	450	450
IHS:									
Vol....................................			133	100	100	100	100	100	100
Schol..................................			20	20	10	5	5	5	5
BOP:									
Vol....................................			0	10	10	10	10	10	10
Schol..................................			7	5	0	0	0		
			-----	-----	-----	-----	-----	-----	-----
Total..................................			833	771	1036	1000	956	910	887
Losses.................................			-841	-833	-451	-490	-401	-401	-395
Federal Loan Repayments ($000).........		$915	$3,953	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000
Scholarships ($000)....................			$2,953	$8,000	$8,300	$6,000	$6,300	$8,000	$8,000
Disadvant. Loan Repayment..............					$20,000	$20,000	$20,000	$20,000	$20,000
Disadvant. Scholarships................					$35,000	$35,000	$35,000	$35,000	$35,000

Assumptions:

	1989	1990	1991	1992	1993	1994	1995
	-----	-----	-----	-----	-----	-----	-----
Loan Repayment	$3,953	$3,000	$3,000	$3,000	$3,000	$3,000	$3,000
Scolarship	$2,953	$6,000	$6,000	$6,000	$6,000	$6,000	$6,000
Loan Repayment			$20,000	$20,000	$20,000	$20,000	$20,000
Scolarship			$35,000	$35,000	$35,000	$35,000	$35,000
Annual cost Loan	$16,500	$18,000	$20,000	$22,000	$24,000	$26,000	$28,000
2.8	$46,200	$50,400	$56,000	$61,600	$67,200	$72,800	$78,400
Base program	112	60	54	49	65	41	38
Disadvant. Health	0	0	357	325	298	275	255
	-----	-----	-----	-----	-----	-----	-----
Total Loan Repayments	112	60	411	374	363	316	293
Annual cost Scholarship	$25,000	$27,500	$31,200	$34,375	$37,812	$41,600	$45,752
2.3	$57,500	$63,250	$71,760	$79,063	$86,968	$95,680	$105,230
Base program	62	95	84	76	69	63	57
Disadvant. Health			488	443	402	366	333
	-----	-----	-----	-----	-----	-----	-----
Total Scholarship	62	95	572	519	471	429	390

NOTE: This is being revised.

EARLY INTERVENTION

Mr. Roybal: Last week the FDA approved use of AZT for asymptomatic HIV-infected persons. Low-income and/or underinsured persons make up a significant share of the 600,000 - 1,000,000 persons who should now have access to AZT.

What role do you see HRSA's Community Health Centers playing in this early treatment for HIV disease for such persons?

Dr. Harmon: The community health centers (CHCs) have traditionally been the sources of health care for 6,000,000 low-income and/or underinsured persons. The change in the AIDS epidemic to disproportionately affect the population served by the CHC is sure to have an effect. HRSA anticipates that CHCs will continue to find more of their patients becoming infected with HIV; we also expect to become the source of care for persons who have previously used other sources. The goal of the current CHC initiative is to have the CHCs engage the asymptomatic infected persons to take advantage of the therapies available for them. The CHCs will be encouraged to manage more of these patients utilizing AZT or pentamidine in their ambulatory setting. The advent of other therapies appropriate for the office setting will make the CHC an even more important resource.

BHCDA AIDS PROGRAM

Mr. Roybal: Last year this Committee approved a first time initiative of $10.9 million for HIV prevention and treatment in CHCs.

How is this money being spent?

Dr. Harmon: The Notice of Availability of Federal Funds for this program is expected to be published in the Federal Register during the first week in April 1990. The grant applications will be due to BHCDA on about June 1, 1990, and awards to be made around September 1, 1990.

Mr. Roybal: Between that and all other sources combined, what is the total funding for AIDS programs at CHCs.

Dr. Harmon: BHCDA has a current evaluation contract examining HIV services in CHCs in various parts of the country and representing various models of care; this evaluation will be completed in mid-April 1990. After the evaluation report and applications are received, a better understanding of cost impact will be available.

Mr. Roybal: Of the 7.5 million patients at CHCs, how many HIV+ patients can be provided comprehensive CHC services with this money?

Dr. Harmon: The CHCs should be able to reach 38,000 patients with services that we were discussing earlier such as bringing the asymptomatic infected persons into CHCs to take advantage of the therapies available for them such as AZT or pentamidine in the outpatient CHC setting. In addition, the community health centers will provide HIV prevention programs such as identification of individuals in high risk groups, outreach to those individuals, and case management to allow the CHC to provide effective management of the infection. These services are representative of the full range of the services to be provided with the funds requested in 1991.

AIDS EDUCATION AND TRAINING CENTERS

Mr. Roybal: This year HRSA awarded supplemental grants to its Regional AIDS Education & Training Centers, to work specifically with the Community and Migrant Health Centers it funds.

How many of the ETCs are there, and how many received these supplemental grants?

Dr. Harmon: There are 15 ETCs and 5 have received supplemental grants.

-Mr. Roybal: How many CHCs have these ETCs worked with?

How many CHC provider staff have now been trained?

Dr. Harmon: Louisiana State University: Will be working with 35 CHCs in 3 States. So far, in Mississippi, 20 providers have been trained in counseling techniques and 77 in general AIDS care training; 35 have been trained in AIDS primary care.

> University of Pittsburgh: Has already trained 450 providers in 40 Community and Migrant Health Centers. Are doing needs assessment in PA and NY to cover needs with expanded efforts and develop specialized programs.
>
> University of Illinois: The ETC has 61 Community and Migrant Health Centers in the 6 States it covers. Training is conducted in 14 of these centers, which have already trained 74 providers.
>
> New York University: This supplemental application was targeted for training health care providers in Puerto Rico. NYU has trained 350 persons at 10 centers and expects to provide training in 11 more centers, training approximately 400 trainees.

Mr. Roybal: Prior to these grants, and with regard to the ETCs which did not received them, how well were ETCs doing at targeting their AIDS training at Community Health Centers? For example, if there were ETCs which did not apply for these supplemental funds, was it because they were already targeting their training services so well in the CHCs in their Region? This is especially critical since CHCs serve such high-risk populations.

Dr. Harmon: Of the fifteen ETCs, all of them work with Community/Migrant Health Centers (C/MHCs). However, some ETCs work more intensely with C/MHCs than others. For example, although didactic continuing education is a relatively commonly implemented component, clinical training often is more expensive and time intensive and therefore not as universally done. The supplementals increased the capacity for training, and also increased the level of skills that could be developed.

There were several reasons why some ETCs did not apply for supplementals for working with C/MHCs. One reason was that there was a period of time when all health centers were not sure that they could provide care to AIDS patients. Since that time, C/MHCs have become involved in prevention, early diagnosis and counseling as essential elements for comprehensive care and have actively requested assistance from ETCs. Another reason is that many ETCs were still busy developing their educational network and were not focused on clinical sites until they could get their faculty and trainers on line.

Reasons for disapprovals for supplementals fell generally into two categories: 1) the quality of the educational intervention proposed, and 2) the reviewers consensus that within the application that Federal monies were replacing existing local funds rather than starting or enhancing initiatives in health centers.

Clearly Congressional interest in the collaboration between ETCs and C/MHCs has stimulated the momentum between these programs to prepare better quality providers to meet the needs of HIV positive individuals and to provide counseling for prevention of future spread.

CLINICAL TRIALS

Mr. Roybal: AIDS drugs must be tested for minorities and women. CHCs operate under very high productivity requirements that limit the time available for deliveries and inpatient care, much less research.

What incentives are you offering CHCs to participate in NIAID to expand this $9 million grants program in FY 1991?

Dr. Harmon: HRSA funds community health centers for the purpose of supporting the delivery of primary health care services to underserved individuals. To the extent that CHCs can participate in research activities such as clinical trials and not jeopardize the quality of care to their service population, they are not discouraged from such participation. CHCs are encouraged to seek other sources of revenue in addition to the CHC grant to support services delivery.

JOINT PRIMARY CARE AND SUBSTANCE ABUSE TREATMENT

Mr. Roybal. How many cities are now served by your demonstration program begun this year with the National Institute on Drug Abuse for joint primary care and substance abuse treatment?

Dr. Harmon. Nineteen cities are now served by the 21 demonstration programs begun this year with the National Institute of Drug Abuse for joint primary care and substance abuse treatment.

Mr. Roybal. What plans are you developing with NIDA to expand this $9 million grants program in FY 1991?

Dr. Harmon. A formal working group was established under the Interagency Agreement with the National Institute on Drug Abuse (NIDA) to discuss the implementation of the program. HRSA is using this forum to discuss the demonstration program and its findings. In addition, exploration is underway as to the continuation of additional joint program activities in the integration of community based primary care and drug abuse treatment services. HRSA is talking with NIDA about its joint programming efforts with the Centers for Disease Control and opening the possibility for interagency collaborative efforts.

Mr. Roybal: What are the early findings from this demonstration program?

Dr. Harmon: The demonstration is bringing together, in some instances, two disparate treatment systems of care and is fostering a dialogue and a better understanding of what needs to be done to make such services effective. Within each system there is a growing recognition of the problems of drug abuse and activities are now more directed towards the goal of providing primary care. In addition, a new infrastructure is developing within some of the funded programs that may lead to relationships with other organizations and joint program funding.

SUBSTANCE ABUSE INTERVENTION TRAINING FOR PRIMARY CARE PROVIDERS

Mr. Roybal: In addition to AIDS, there is a critical need to train physicians serving high-risk communities in substance abuse intervention.

What programs are under way in HRSA to work cooperatively with ADAMHA to achieve this end, particularly with regard to CHCs?

Dr. Harmon: The Bureau of Health Care Delivery and Assistance (BHCDA), in collaboration with the Office of Substance Abuse Prevention, ADAMHA is developing a substance abuse curriculum to train primary care providers in Federally funded CHCs in methods of diagnosing substance abuse, referring patients for treatment, and in establishing prevention programs. The material, geared toward those primary care providers who service high risk populations, includes a participant manual as well as curriculum guides for the trainers.

The first stage in this process will be to train a cadre of primary care providers to provide hands on staff development relating to the issues of substance abuse. These trainers will then be the faculty for the training of the primary care practitioners within the CHC network.

Future plans are for the National Primary Care Institute of the National Association of Community Health Centers to assume responsibility for the training of trainers and for staff development in the dissemination of the substance abuse curriculum.

HEALTH PROFESSIONS

Mr. Roybal: Under the Administration's FY 1991 budget proposal, a $144,190,000 budget decrease is proposed in Health Professions total operating budget. Given the fact that numerous reports emphasize that there are shortages of health care professionals (geriatric physicians, nurses, allied health professionals) in various health care settings (rural and inner city).

How can this decrease be justified?

Dr. Harmon: The Administration's proposed decrease is $178,652,000 for Health Professions Training in FY 1991.

In FY 1991, BHPr will focus health professions support on programs designed to assist minority and disadvantaged students. These programs include: exceptional financial need scholarships; the excellence in minority health program; the financial assistance for disadvantaged students program; and the health careers opportunity grant program. Also, the Bureau will continue to carryout direct

Federal responsibilities to effectively address the AIDS epidemic.

Health professions students may seek financial assistance from a number of other sources such as the Department of Education Programs, State and local governments and other private sources.

Mr. Roybal: How is the $144,190,000 cut being made?

Dr. Harmon: The attached table shows proposed discontinued programs and their funding levels for FY 1990.

Mr. Roybal: What amount is being appropriated for geriatric physician training and fellowship?

Dr. Harmon: In FY 1990, $14,300,000 was appropriated for geriatric projects under section 789 of the PHS Act: $10,000,000 for Geriatric Education Centers; and $4,300,000 for Faculty Fellowships in Geriatric Medicine and Dentistry.

Mr. Roybal: What specific programs are being provided to improve the geriatric training curriculum for medical students and residents?

Dr. Harmon: All 38 of the Geriatric Education Centers (GEC's) supported under section 789(a) target medical school faculty and community based physicians through intensive short-term programs that emphasize faculty development, clinical site development, curriculum building, and continuing education. By 1988, 500 allopathic and osteopathic physicians had participated in GEC educational offerings of 40 hours or more, including "mini-fellowships" for faculty committed to augmenting existing medical school curriculum and developing a broader range of clinical training and residency sites. At the Minnesota Area GEC, for example, GEC faculty fellows from family medicine have been working with Family Practice's dean for undergraduate curriculum affairs to enhance the geriatric content of the ambulatory medicine rotation for third and fourth year students; have reviewed the geriatric content of the entire family practice residency (graduate); and have developed a year-long home care curriculum that is now being considered for AMA endorsement and potentially wide use within medical schools throughout the country. Teaching materials in geriatric medicine developed by GEC's include curriculum resource guides, case-based learning materials, and a monograph for clinical preceptors on improving the teaching of geriatrics.

Mr. Roybal: Under Health professions student assistance and exception need scholarships, a $10,000,000 amount is proposed in the Administration's FY 1991 budget.

How many scholarships are set aside for minorities, including Hispanic-American students?

Dr. Harmon: In FY 1991, approximately 3,334 scholarships will be awarded to student with exceptional financial need. The Exceptional Financial Need scholarships are not specifically targeted at minority students.

BUREAU OF HEALTH PROFESSIONS
Discontinued Programs in FY 1991
($'s in thousands)

	PHS Act Section	FY 1990 Revised Approp.
Health Promotion/Disease Prevention:		
P.H. Capitation	770	$2,948
P.H. Traineeships	792	2,987
Graduate Prog. in Health Admin	791	1,483
Health Administration Traineeships	791A	492
Preventive Medicine Residencies	788(c)	1,695
Public Health Special Projects	790A	834
Allied Health Projects	796	737
Subtotal, Health Prom/Disease Prevention		$11,176
Primary Care:		
Family Medicine Res. and Trng	786	$32,760
Gen. Dent. Residency and Training	785	3,929
Gen. Int. Med. & Pediatrics	784	17,683
Family Medicine Departments	780	6,680
Physician Assistants	788(d)	4,789
Subtotal, Primary Care		$65,841
Geriatric Training and Research	301/789(a,b)	$14,047
H.P. Special Projects	788(a,b,e)/301	$2,457
Pacific Basin Medical Officers' Trng	301	$1,638
AHEC/HETC:		
Area Health Education Centers	781(a-e)	$18,125
Health Education & Training Centers	781(f)	3,929
Subtotal, AHEC/HETC		$22,054
H.P. Analytical Studies/Reports	708/301	$1,846
Rural Hlth Interdisciplinary Training	799A	$2,210
SUBTOTAL, HEALTH PROFESSIONS		$121,269

BUREAU OF HEALTH PROFESSIONS
Discontinued Programs in FY 1991
($'s in thousands)

	PHS Act Section	FY 1990 Revised Approp.
Nursing:		
Advanced Nurse Education................	821	$12,771
Nurse Practitioner/Midwife..............	822	13,432
Nurse Special Projects a/...............	820	10,283
Nurse Traineeships......................	830(a/c)	13,501
Nurse Anesthetists......................	831	1,130
Nursing Scholarships....................	843	2,948
SUBTOTAL, NURSE EDUCATION................		$54,065
AD HOC Hospitals.........................	608/704/705	$1,343
National Practitioners (HCQI) Data Bank...	PL 99-660	$1,974
GRAND TOTAL..............................		$178,651

a/ Includes Subpart II- Nursing Education Opportunities for Individuals from Disadvantaged backgrounds.

Mr. Roybal: What health professions are included in the scholarships?

Dr. Harmon: Schools of medicine, osteopathic medicine, dentistry, veterinary medicine, optometry, podiatric medicine, and pharmacy are the health professions schools that are awarded EFN scholarships.

Mr. Roybal: What are the funding amounts of each scholarship and funding of each scholarship program?

Dr. Harmon: The funding amounts for individual scholarship vary at each school. A scholarship may cover the cost of tuition and fees, other reasonable educational expenses, and a monthly stipend for living expenses.

In FY 1989, the average scholarship was $18,448. Awards totalling $6,512,215 were made as follows:

Discipline	No. of Programs	No. of Scholarships	Amount Awarded
Medicine	125	164	$3,278,290
Osteopathic	15	17	371,618
Dentistry	56	70	1,465,945
Optometry	14	14	249,907
Pharmacy	57	57	629,832
Podiatry	7	7	171,940
Vet. Medicine	24	24	344,683
	298	353	$6,512,215

Under the Health professions institutional assistance and excellence in minority health education grants' line item (#2230) a $12,000,000 amount is proposed in the Administration's FY 1991 budget.

Mr. Roybal: What percentage of this grant money is allocated for minorities, including Hispanic-American students?

Dr. Harmon: This grant program is restricted to those health professions schools which received a contract under section 788B of the PHS Act (Advanced Financial Distress Assistance) for fiscal year 1987. The eligible schools are all historically black institutions; thus the grant support provided is almost exclusively in support of black students.

Mr. Roybal: What health professions are represented?

Dr. Harmon: Grants are currently awarded to four schools representing the fields of medicine (Meharry Medical College), dentistry (Meharry Medical College, School of Dentistry), veterinary medicine (Tuskegee University, School of Veterinary Medicine), and pharmacy (Xavier University of Louisiana College of Pharmacy).

Mr. Roybal: Under the Minority/Disadvantage assistance, a $31,578,000 amount is proposed in the Administration's FY 1991 budget.

What assistance is being given to the minority populations?

Dr. Harmon: The Disadvantaged Assistance, Health Careers Opportunity Program (HCOP) assists individuals from minority/disadvantaged backgrounds to enter and graduate from health and allied health professions training programs. Specifically, it supports recruitment, education designed to expand the academic ability of minority/disadvantaged students during their preprofessional training, facilitate their entry into health professions schools, and enhance their retention potential in these schools through to graduation.

Mr. Roybal: What are the funding amounts for disadvantaged students, including Hispanic-Americans?

Dr. Harmon: The Disadvantaged Assistance, Health Careers Opportunity Program (HCOP), provides academic and non-academic support systems to assist individuals from minority/disadvantaged backgrounds to enter and graduate from health and allied health professions training programs. Other than the $20 per day stipend for students during their 6-8 week program, the HCOP does not provide student assistance. Of the $21.1 million appropriated for HCOP grants in FY 1989, it is estimated that $13.3 million benefited Black students, $4.0 million benefited Hispanic students, $2.3 million benefited Native American students, $1.1 million benefited disadvantaged White students, and $0.4 million benefited Asian American students.

The Disadvantaged Assistance legislative authority specifies that 20 percent of the funds appropriated under this section shall be obligated for stipends to individuals of exceptional financial need who are students at schools of medicine, osteopathy, or dentistry. Data are not currently available describing racial/ethnic breakouts of recipients of these scholarships.

Mr. Roybal: How many disadvantaged students, including Hispanic-Americans, are being assisted?

Dr. Harmon: Through the $21.1 million appropriated for HCOP grants in FY 1989, a total of 13,072 students benefited. Of the students benefitting, 8,158 (63 percent) were Black Americans; 2,411 (19 percent) were Hispanic Americans; 1,675 (13 percent) were Native Americans; 451 (3.5 percent) were disadvantaged Whites; and 377 (1.5 percent) were Asian Americans.

Mr. Roybal: Under the Disadvantaged minority health improvement, a $17,000,000 amount is proposed in the Administration's FY 1991 budget.

What minority health improvements grants are being targeted for funding?

Dr. Harmon: Under the Health Professions Institutional Development segment, for which $12,000,000 is proposed, faculty development (including a research component) in relevant areas of science and pedagogy and maintaining tuition levels in eligible institutions whose student bodies historically have a majority of minority students are planned.

Under the Community-based Recruitment and support segment, for which $5,000,000 is proposed, community-based organizations would carry out innovative projects to recruit potential health professions students from the community, support their health professions education, and establish and obligation for service as a health professional in the local community.

Mr. Roybal: How much money is being targeted for the minority health improvement of Hispanic-Americans?

Dr. Harmon: Sixty-seven (67) institutions, whose student bodies historically have a majority of minority students would be eligible under the Health Professions Institutional Development segment, for which $12,000,000 is proposed. Twenty-three (23) of these institutions predominantly serve Hispanic-American students. It is projected that these institutions would receive approximately $4 million through this program.

Under the Community Based Recruitment and Support segment, for which $5,000,000 is proposed, it is our estimated that approximately $950,000 or 19 percent of these funds would benefit Hispanic-American students.

Mr. Roybal: The current shortage of health care professionals, primarily in nursing, geriatric medicine and the allied health professions, will become more critical in the 21st Century according to two studies. The Institute of Medicine's Allied Health Services: Avoiding Crises study and the Bureau of Health Professions' Sixth Report to the President and Congress on the Health Status of Health Personnel in the United States agree that the increasing size of the elderly population will severely tax, if not overwhelm, the caregiving professionals. In light of these studies' conclusions, how does the Administration justify the elimination of geriatric training and research?

Dr. Harmon: The elimination of BHPr support for geriatric training would modify, but not eliminate efforts in this area. Other sources of support for training and retraining of health professionals in geriatrics include the Veterans Administration, National Institute on Aging, Administration on Aging, providers, private foundations, and state governments.

NURSE TRAINING

Mr. Roybal: Under the Administration's FY 1991 budget proposal, a $53,618,000 budget decrease is proposed in Nurse Training. Given the continuing nationwide shortage of registered nurses, how is this decrease being justified?

Dr. Harmon: The aggregate supply of registered nurses is at an all-time high and is projected to increase until about 2010. The Secretary's Commission on Nursing assessed the cause of the nursing shortage as stemming from the increases in employer demand which could not be met by supply.

The Commission's "Development of Nursing Resources" recommendation which deals with financing nursing students education will continue to receive support by the Nursing Student Loan revolving funds. The Nursing Student Loan program provides loans at reduced rates to needy nursing students.

In FY 1991, the Nursing Student Loan revolving funds will make available approximately $13 million for loans to approximately 6,500 students. The FY 1991 budget proposes $4,000,000 for the Nursing Education Opportunities program. This program will address high priority areas, e.g., increasing nursing opportunities for individuals from disadvantaged backgrounds. Also proposed in FY 1991 is an Institutional Development Program which will provide capitation to schools of nursing that have a majority enrollment of minority students and are maintaining tuition levels that reflect the financial capacities of their students.

Mr. Roybal: The Administration's FY 1991 budget proposes $4,000,000 for nurse disadvantaged assistance. How is the money being distributed in terms of breakdown of student ethnicity?

Dr. Harmon: There are no plans to distribute the money by student ethnicity for the Nurse Opportunities program. This program will address high priority areas such as increasing nursing opportunities for individuals from disadvantaged backgrounds.

Mr. Roybal: The Administration's FY 1990 budget proposed $12,854,000 for special projects. How many projects were funded to address the issues of nurse ~~in~~retention and recruitment?

Dr. Harmon:

- Twenty (20) projects were funded which address nurse retention under Section 820.
- Twenty six (26) projects were funded which address nurse recruitment and retention under Section 827.
- One contract will be let during FY 1990 to provide retention and career mobility opportunity for Hispanic registered nurses under Section 820.

Mr. Roybal: Please describe the special projects targeted at nurse retention and recruitment?

Dr. Harmon:

- Prairie View A & M University, a historically black university, is carrying out a project to recruit, retain, and graduate students in baccalaureate nursing programs. The target group of students come from disadvantaged backgrounds. Students are identified, enrolled, and provided a specialized support program to foster self-development and the development of competencies needed for academic success.

- Chicago State University provides disadvantaged students an academic enrichment support program which facilitates completion of the baccalaureate nursing program. Faculty are provided a development program which improves their teaching strategies. Peer tutors have also been effective in contributing to the success of the project.

- Two cooperative agreements between the Division of Nursing and the National Center for Nursing Research support research and demonstration projects at the University of Arizona and the University of Rochester. Innovative nursing practice models and a research protocol are in place in acute care, community and rural hospital settings. Many innovations in the models address issues of concern to nurses employed in hospitals. The results of this 5-year effort, now in its second year, should be of assistance in nurse recruitment and nurse retention in the three types of hospitals.

- A potential group for recruitment into professional nursing are licensed practical nurses (LPNs) currently employed in hospitals. Projects which have programs for LPNs who are studying to become RNs include Norfolk State, Virginia; Tuskegee, Alabama; Cape Cod Community College, Massachusetts; and CUNY, New York.

Mr. Roybal: What is being done to disseminate the results and information on special projects involving nurse retention and nurse recruitment?

Dr. Harmon:

- Grantees are encouraged to disseminate information about successful special project grant outcomes. This occurs through presentations at local, state, or national nurses meetings; publication of articles in local news media or nursing journals; and informal sharing among peer groups.

- Division of Nursing staff share information about successful grants while providing consultation, presenting workshops, or when potential applicants request information about the experience of other grantees who carried out projects in areas of similar interest.

Mr. Roybal: How can the Administration justify the elimination of special projects in its proposed budget for FY 1991?

~~M~~Dr. Harmon: The aggregate supply of registered nurses is at an all-time high and is projected to increase until about 2010. The Secretary's Commission on Nursing assessed the cause of the nursing shortage as stemming from the increases in employer demand which could not be met by supply.

Schools of nursing will continue to develop and offer nursing programs which address the career development and access needs of nurses. Baccalaureate programs are beginning to develop nursing curricula that foster the career development of nonbaccalaureate prepared RNs. Associate degree nursing programs are also developing career mobility tracks for LPNs to obtain an RN license.

RURAL HEALTH

Mr. Roybal: Please provide a list of the specific new or expanded initiatives being undertaken to address the problems of rural health care. Also, indicate how funding for these initiatives compare with any similar initiatives in the 1970's.

Dr. Harmon: The Office of Rural health Policy will fund two new rural health research centers in FY 1990. This will expand the total number of center to seven.

In collaboration with the Department of Agriculture, the Office of Rural Health Policy will begin operation of a Rural Health Information Clearinghouse in FY 1990. The Clearinghouse will collect and disseminate information on rural health care activities supported by all levels of government as well as the private sector.

In FY 1990 approximately $2 million is available for a new grant program authorized in FY 1989 -- the Interdisciplinary Training for Health Care for Rural Areas. The purpose of the program is to provide support for the education and training of health care professionals to encourage and prepare them to enter into and/or remain practice in rural America.

The FY 1991 President's budget includes $1 million for a program of technical assistance to rural hospitals in trouble. This program will require the development and dissemination of technical materials as well as limited on site consultations.

All of these programs are products of the 1980's. During the 1970's major rural health initiatives included the National Health Services Corps, and the Rural Health Initiative, under which the community health center program which had focused primarily on inner cities was expanded to include many rural grants. Both of these program are still in existence.

Mr. Roybal: What steps are being taken to plan for or improve emergency medical services systems in rural areas?

Dr. Harmon: The Department supports State emergency medical systems through the Preventive Health and health Services Block Grant administered by the Centers for Disease Control in Atlanta, GA. Under the block grant program, States can allocate funds to seven service areas, including the development of regional systems to coordinate emergency medical services. In 1988, approximately $13 million of block grant funds were spent on emergency medical systems.

Central City Health Care

Mr. Roybal. Please provide a list of the specific new or expanded initiatives being undertaken to address the problems of central city health care. Also, indicate how funding for these initiatives compare with any similar initiatives in the late 1970s.

Dr. Harmon. Although some of HRSA's programs provide health care services to otherwise underserved inner city Americans, HRSA does not have a specific inner or central city initiative.

NATIONAL HEALTH SERVICE CORPS

Mr. Roybal: How does proposed funding of the National Health Service Corps compare with funding in the 1970's?

Dr. Harmon: The funding levels were higher in some years of the 1970's because of the greater proportion of Federally salaried assignees.

Mr. Roybal: How adequately does this meet the needs of rural and central city shortage areas?

Dr. Harmon: At present, there is a need for about 4,200 primary care physicians in order to eliminate all Health Manpower Shortage Areas (HMSA). Of this number of primary care physicians, about 55 percent would be required in metropolitan areas and 45 percent would be required in non-metropolitan areas.

ALZHEIMERS DISEASE

Mr. Roybal: Over the past three years, a demonstration program for State Alzheimers Programs has been authorized, but no funds have been made available. What are the Administration's view on funding those?

Dr. Harmon:

- The Alzheimer's Disease Demonstration Projects, as mandated in Section 9342 of the Omnibus Budget Reconciliation Act of 1986, are administered by the Health Care Financing Administration (HCFA).
- HCFA implemented the program in the Fall, 1989.
- Services provided through the demonstration to Alzheimer's patients are financed through the trust funds. Administrative costs borne by the eight participating sites are financed through both the trust funds and HCFA's research budget. Evaluation costs will be financed solely by HCFA's research budget.
- In FY 1990, HCFA is spending $11.2 million on the projects. In FY 1991, HCFA plans to spend $13.4 million. HCFA is currently not experiencing any funding problems associated with the Alzheimer's Disease Demonstration Projects.

MINORITY HEALTH INITIATIVE

Mr. Roybal: Under the Minority Health Initiative, how many universities will be eligible to participate? Please provide a list of the universities.

Dr. Harmon: It is estimated that 65 programs will be eligible to participate under the Health Professions Institutional Development component. They are as follows:

Name	Discipline	State
Drew	Medicine	California
Meharry Medical College	Medicine	Tennessee
Meharry Medical College	Dentistry	Tennessee
Morehouse	Medicine	Georgia
Tuskegee University	Veterinary Medicine	Alabama
University of Hawaii	Public Health	Hawaii
University of Hawaii	Medicine	Hawaii
Ponce	Medicine	Puerto Rico
Universidad Central Del Caribe	Medicine	Puerto Rico
University of Puerto Rico	Medicine	Puerto Rico
University of Puerto Rico	Public Health	Puerto Rico
Texas Southern	Pharmacy	Texas
Xavier	Pharmacy	Louisiana
Florida A&M	Pharmacy	Florida
Howard University	Pharmacy	Washington, D.C.
University of Puerto Rico	Pharmacy	Puerto Rico
Bishop State Jr. College	Nursing	Alabama
Lawson State Community College	Nursing	Alabama
Oakwood College	Nursing	Alabama
Tuskegee Institute	Nursing	Alabama
University of Arkansas	Nursing	Arkansas
Delaware State College	Nursing	Delaware
Howard University	Nursing	Washington, D.C.
Univ. of the Dist. of Columbia	Nursing	Washington, D.C.
Bethune-Cookman College	Nursing	Florida
Florida A&M College	Nursing	Florida
Albany State College	Nursing	Georgia
Morris Brown College	Nursing	Georgia
Kentucky State University	Nursing	Kentucky
Dillard University	Nursing	Louisiana
Grambling State University	Nursing	Louisiana
Southern University	Nursing	Louisiana
Bowie State College	Nursing	Louisiana
Coppin State College	Nursing	Maryland
Shaw College at Detroit	Nursing	Michigan
Alcorn State University	Nursing	Mississippi
Lincoln University	Nursing	Missouri
North Carolina A&T State Univ.	Nursing	North Carolina
Winston-Salem State University	Nursing	North Carolina
Langston University	Nursing	Oklahoma
Puerto Rico (16 Schools) 1/	Nursing	Puerto Rico
South Carolina State College	Nursing	South Carolina

Name	Discipline	State
Prairie View A&M University	Nursing	Texas
Hampton Institute	Nursing	Virginia
Virginia State College	Nursing	Virginia
University of Hawaii	Nursing	Hawaii
Howard University Washington, D.C.	Health Admin.	
University of Puerto Rico Rico	Health Admin.	Puerto
Meharry	Health Admin.	Tennessee
Florida A&M	Health Admin.	Florida

1/ Sixteen (16) schools included in the total of 65

Mr. Roybal: In reference to the health professions, how is the money being divided between physicians, nurses, and allied health professions?

Dr. Harmon: Health professions schools, (medicine, osteopathic medicine, dentistry, optometry, podiatric medicine, veterinary medicine, and public health) in institutions whose student bodies historically have a majority of minority students would be eligible for awards up to $1,250 per full-time enrolled student. Schools of pharmacy and nursing, graduate programs in health administration and physician assistant training programs would be eligible for awards of up to $750 per full-time enrolled student. Allied health training institutions are not included in this formula.

Mr. Roybal: Is population parity part of the overall decision-making process in selecting minority students?

Mr. Harmon: Population parity is not a primary criteria in selecting minority students for participation in minority initiative programs since target populations differ considerably by geographic location in which the program is being offered.

AREA HEALTH EDUCATION CENTERS/BORDER HEALTH EDUCATION CENTERS

Mr. Roybal: Your budget request proposes not to fund the Area Health Education Centers.

What is the rationale for this proposal?

Dr. Harmon: We are looking at other alternatives to address the health personnel geographic and specialty maldistribution issues which are impacting negatively on people living in underserved areas.

Mr. Roybal: How do you plan to address the need to increase the number of under represented minorities in the health professions?

Dr. Harmon: In Fiscal Year (FY) 1990, there are 17 federally supported AHEC programs ongoing in 20 states. We anticipate that the minority recruitment and retention activities carried out by many of the AHEC programs, including those carried out by Meharry Medical College, Morehouse School of Medicine, and the HISMET (Hispanic Medical Education and Training) Program in California, will be supported in the future through State and local resources.

Mr. Roybal: The FY 1991 budget request also proposes to eliminate the Border Health Education Centers. What is the rationale for this budget proposal?

Dr. Harmon: In FY 1991, BHPr will focus health professions support on programs designed to assist minority and disadvantaged students. These programs include: exceptional financial need scholarships; the excellence in minority health program; the financial assistance for disadvantaged students program; and the health careers opportunity grant program. Also, the Bureau will continue to carryout direct Federal responsibilities to effectively address the AIDS epidemic.

Mr. Roybal: How do you propose to continue the border health initiative?

Dr. Harmon: We anticipate that the federally supported first year planning activities begun by the 12 grantees, will be followed up with State and local support in order to implement specific Health Education and Training Centers (HETCs) training programs and activities in urban and rural areas that have demonstrated serious unmet health care needs. The grant program for HETCs in Border areas and other areas of the United States began in FY 1990. A total of $3.8 million was made available to award 12 competitive grants.

Mr. Roybal: If you are not proposing funding, what factual information do you have that ascertains that the need for the centers has been met?

Dr. Harmon: The 12 ongoing HETC projects are in a start-up phase, the 01 project year, with each grantee carrying out planning and needs assessment activities.

At this time, factual information in the form of data is not available to ascertain that the needs of the populations in areas served by the HETCs have been met.

AIDS

Mr. Early: The FY 1990 bill provided increases over the budget request for the Hemophilia Treatment Centers program. How much are you allocating for the program in FY 1990?

How much is included in the FY 1991 request?

Dr. Harmon: The fiscal year 1990 level for the hemophilia program is $4.7 million. The fiscal year 1991 request includes level funding for this program.

Mr. Early: What progress has been made in extending and expanding comprehensive services to the Hemophilia population? What are your plans for FY 91?

Dr. Harmon: The network of comprehensive hemophilia diagnostic and treatment centers have been struggling in recent years to overcome the professional, financial and social burdens placed upon them by HIV infection and AIDS. While costs have risen, placing additional burdens upon treatment center staff, and the number of sick patients and their families have increased dramatically, the comprehensive care system has responded and retained the model of cost-effective, regionalized and comprehensive care.

For the first time in fiscal year 1989, a small number of treatment centers, which had until then received no federal comprehensive care funding, finally received comprehensive care dollars to support a portion of their activities. Support to these facilities will be maintained in 1990.

Due to the AIDS epidemic and the implementation of plans to reach those individuals not currently part of the comprehensive treatment network and the sexual partners of individuals with hemophilia, centers have increased the numbers served by as much as 200 to 400 percent.

For 1991, it is the intent of the program to maintain support to treatment centers at current levels. Additional emphasis will be placed upon coordination and collaboration of services with other community based programs for HIV services.

In an attempt to coordinate, plan and evaluate comprehensive care on a regional basis, the program has located one or two coordinators in each region to assist treatment centers in identifying persons in need of services, gaps in services and the need for additional technical assistance.

Mr. Early: Please bring us up to date on the Pediatric Aids Initiative.

Dr. Harmon: There are currently 17 Pediatric AIDS service demonstration projects, 13 in their second year and four in their first year of operation. Recognizing the need for community based approaches to the problem, in 1990 we decided to divide funding for the program into three major components.

Emphasizing community based approaches in the first program component, health care demonstrations, we plan to add from six to eight new demonstration projects in 1990.

In addition, we have added two entirely new categories of funding in fiscal year 1990. These are: up to three grants for Pediatric AIDS comprehensive centers, which will establish public-private consortia of health and related institutions to address the pediatric AIDS problem; and from four to six grants for National Issues of High Priority in Pediatric AIDS, including a National Pediatric AIDS Resource Center.

Mr. Early: Have we seen any increase in state and local resources for these projects?

Dr. Harmon: We do not have any estimates on State and local resources for services in Pediatric AIDS. No matching is required by law for the Federal Pediatric AIDS demonstration projects, but the projects do use a significant mix of both State and local resources.

Mr. Early: Has there been any evaluation to determine whether these projects have increased the capacity of State and local Governments to address this serious problem?

Have these projects funded, thus far, been effective, in your opinion?

Dr. Harmon: There has not been any evaluation of the Pediatric AIDS service demonstration program besides the projects' own internal evaluations. These progress reports are completed on an annual basis.

Plans call for comprehensive evaluations of the projects to begin in the near future. We will make every effort to assure that a component of the studies looks into the projects' ability to increase State and local capacity.

Mr. Early: What amount is needed in FY 1991 to fund continuation projects at the approved rate?

Dr. Harmon: Approximately $12 million will be needed in fiscal year 1991 to fund continuation projects at a current service level.

Mr. Early: How much did HRSA request for this program in FY 1991?

How would these additional funds be used?

Dr. Harmon: The HRSA request to the Public Health Service was $20 million. Any additional funding for Pediatric AIDS demonstration projects would be used to expand the capacity of existing projects and then to add projects in geographic areas of emerging need.

Mr. Early: What amount is needed in FY 1991 for AIDS Education and Training Centers to fund continuation projects at the approved rate?

Dr. Harmon: Approximately $16,000,000 will be needed to fund 15 AIDS ETC's in FY 1991.

COMMUNITY HEALTH CENTERS

Mr. Early: The budget request includes $438.3 million for Community Health Centers, an increase of $11 million.

Is this amount sufficient to maintain current services?

Are you assuming an increase in revenue from CHC's from non-Federal sources?

Dr. Harmon: The amount requested will maintain current services. The budget projects an increase of about $40 million in C/MHC income from other sources, including a $20 million increase from Medicaid reimbursement. Included in the requested increase of $12 million is $10 million for salary increases of C/MHC doctors and $2 million to purchase vans for the transport of pregnant women and new mothers to and from their appointments at CHCs.

Mr. Early: Will the FY 1991 request allow centers to serve an increased number of individuals?

Dr. Harmon: The 1991 request will provide services to about the same number of people.

Mr. Early: The justification indicates that CHC's face both a current and projected shortage of physicians.

What steps are you taking to address this problem in the short-term?

In the long-term?

Dr. Harmon: To address the problem in the short term we are requesting funding to support the improvement of physician salaries at CHCs. The 1991 request includes $10 million for community and migrant health centers to support a 15 percent pay increase for about half of the doctors at these centers. This increase will assist the centers in retaining current staff and/or replacing those who leave. The 1991 budget includes $64 million for NHSC recruitment, an increase of $55 million over the 1990 level. This activity supports both scholarships and loan repayments to attract health care practitioners. The loan repayment mechanism represents a short term solution since such obligors will have completed their training and are ready to begin service immediately following acceptance of a match to a site. The 1991 request will support about 920 single year funded loan repayment agreements. The increase in the number of scholarships that will be supported with this request is an effective long term solution to the shortage problem. The 1991 request will support about 450 multiyear funded scholarships. Ultimately the recruitment program should provide about 900 obligors per year to support an obligated field strength of 2,400. This level of obligors should provide an adequate supply of health practitioners for C/MHCs.

Mr. Early: Does HRSA plan to continue the NHSC Loan Repayment program in FY 1991 to help CHC's address the shortage problem?

Dr. Harmon: Not only does HRSA plan on continuing the NHSC loan repayment program, the NHSC recruitment program which is comprised of loans and scholarships has a $55 million increase.

Mr. Early: How much flexibility will CHC's be given to utilize this program?

Is it being restricted to recruitment of specific types of physicians?

What if a CHC has a pressing need for a specialty (Ex. OB-GYN) not on your list?

Dr. Harmon: The recruitment of National Health Service Corps loan repayment obligors is the responsibility of the of the National Health Service Corps program. The potential obligor agrees to serve in a site on a listing of Health Manpower Shortage Areas (HMSA) developed by the program based an evaluation of the relative need for health practitioners in HMSAs across the nation. This selection is made before the commitment to serve is made and the obligor has more flexibility in site selection than does a scholarship obligor. The program emphasizes primary care providers generally and, in urban areas particularly, OB-GYNs. Most new obligors, both scholarship and loan repayment are going to community health centers. However, if a center is not on either the scholarship or loan repayment list it is not likely to receive a NHSC assignee.

Mr. Early: The FY 1990 bill included funds for a Nursing Loan Repayment program in shortage areas, such as a Public Health hospital.

How much has be allocated for this program in FY 1990?

Dr. Harmon: Approximately $975,000 will be available for loan repayment awards.

Mr. Early: What is the implementation status of this program?

Dr. Harmon: Program announcements are now being mailed to all nursing schools. Nursing schools will begin distributing application forms for submission to HRSA. Applications should be received by mid-June and awards should be made late in August.

Mr. Early: Why haven't funds been requested for this program in FY 1991?

Dr. Harmon: Funds for nurse loan repayment support are available in the NHSC recruitment budget, it was decided that funding for this activity could be eliminated.

Mr. Early: Provide for the Record the information requested below for the following program: General Internal Medicine Residences; Family Medicine Residences; Family Medicine Departments; Each of the Nurse Training Programs (Where Applicable).

Dr. Harmon: The table follows.

Mr. Early: Of the projects funded in FY 1990, how many would be in non-competing status and how many would be competing renewals in FY 1991?

What amount is needed to fund non-competing continuations at the approved rate?

How much more would be needed to fund all projects up for renewal at the estimated FY 1990 award rate?

How many new projects will be funded in FY 1990, and what would be the cost of continuing these projects in FY 1991?

Dr. Harmon: The following table provides the requested information.

FY 1990 Continuation Costs
($'s in Millions)

	FY 1991 Non-Competing Continuations (A)		FY 1990 New Awards Included in Column A (B)		FY 1991 Competing Renewals (C)		Total, FY 1991 Non-Competing Continuations & Competing Renewals (Columns A & C)	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Family Medicine Residencies.....	136	$13.6	(67)	($8.7)	51	$5.400	187	$19.000
General Internal Medicine/ General Ped Residencies.......	53	$9.1	(44)	($7.6)	26	$5.300	79	$14.400
Family Medicine Departments.....	37	$5.1	(12)	($1.3)	10	$1.000	47	$6.100
Nursing Special Projects........	39	$5.8	(26)	($4.2)	2	$0.250	41	$6.050
Advanced Nurse Education........	22	$3.5	(10)	($2.0)	24	$4.800	46	$8.600
Nurse Practitioner/Midwife......	17	$3.3	(25)	($5.8)	13	$2.700	30	$6.000
TOTAL........................	304	$40.7	(157)	($29.6)	126	$19.450	430	$60.150

Mr. Dwyer: The Administration has proposed to transfer the Title X family planning program from a categorical grant program under HRSA to a state planning program under the Office of the Assistant Secretary for Health. Has Title X family planning been ineffective as a categorical grant? Why should it be transferred from HRSA to OASH? How will the family planning institutions currently receiving funding be affected by this change?

Dr. Harmon: Title X has been administered as a categorical grant program by the Office of Population Affairs within OASH since 1983. We are convinced that shifting the management of the program to the states has many advantages over a Federally operated program:

- It provides States and territories with resources and appropriate control over those resources to deliver voluntary family planning services effectively.
- It promotes efficiency, responsiveness and flexibility to meet local service needs and priorities.
- Services can be provided that are in accordance with local needs and priorities and are in accordance with State law on matters such as parental consent or notification.

Of the current 86 grantees, there are 33 States and territories in which a state agency is the single state grantee. In an additional 14 states, state/county agencies are one of multiple grantees within the state. There are great variations in the way that these states deliver services. In the southeast, most state family planning funds are channeled through county health departments. Most other states provide services to their citizens by contracting with service delivery entities including Planned Parenthoods, hospitals, city health departments, independent non-profits and other entities. There is every reason to believe that when the balance of the states become primary grantees that they will contract with those same entities that are already delivering services within their states.

Mr. Dwyer: AZT has proven to be an effective drug therapy for AIDS sufferers. The medical community recommends prescribing AZT to HIV-positive individuals as soon as possible. Despite this, the HRSA budget request does not provide funding for HIV Drug Reimbursement for fiscal year 1991, because "many private insurers and all States now pay for some HIV treatment drugs." In light of the enormous number of uninsured and underinsured individuals, which the Administration is concerned about, how can you justify this request? Are there any effective AIDS drug therapies which are not paid for by either Medicare/Medicaid or private insurers?

Dr. Harmon: The AIDS Drug Reimbursement Program was originally established under an emergency appropriation to allow time for the inclusion of AZT in State formularies of drugs reimbursable under Medicaid. The Health Care Financing Administration reports that all State Medicaid programs now cover AZT as well as aerosolized pentamidine and alpha interferon. The Health Insurance Association of America (HIAA) surveyed the major commercial health insurance firms about AZT coverage shortly after clinical trials indicated that it may be useful in prophylaxis. All of the major firms were covering AZT in therapeutic and prophylactic use. The HIAA estimates that now virtually all commercial health insurance firms cover AZT in both therapeutic and prophylactic use, and there is no reason to expect that the commercial insurers will not in the near future cover other drugs approved by the Food and Drug Administration.

Mr. Dwyer: Dr. James Mason told the subcommittee that the number of reported AIDS cases continues to increase. Although the number of HIV-positive individuals who develop AIDS and ARC continues to climb, HRSA has not requested funding for Formula Grants to States for Home Health Care or for Subacute Care Demonstrations and cut funding for AIDS to climb at an alarming rate, how can HRSA justify cutting these important care programs?

Dr. Harmon: The formula grants for Home and Community-Based Health Services and for Subacute Care Demonstrations were authorized by the Health Omnibus Programs Extension of 1988. The intent was to encourage the development and provision of these services by the States and Territories. Secretary Sullivan has stated emphatically that care for person with AIDS and HIV infection can be most appropriately and efficiently provided in the centers of the existing system of health care delivery. Admittedly, some gaps in that system do exist. To address this, as well as other problems, the Secretary has established a task force, head by Under Secretary Constance Horner, to review the current system and develop recommendations for needed changes. In this context, we will address the health needs of all our citizens, including these will AIDS and HIV infection.

HEALTH CARE FOR THE HOMELESS

Mr. Hoyer: Mr. Early and I were very concerned about the health care for the homeless grants last year, and the committee added $11 million for that in advanced FY 1991 funding.

How much was actually allocated to grantees in 1987, 1989 and 1990 through carry-over or funding from earlier appropriations? Other?

Dr. Harmon: The initial funding was a $46 million supplemental in 1987. No grants were operational during that fiscal year. The operating levels for fiscal years 1988 and 1989 were $28.9 million and $45.1 million, respectively. In fiscal year 1990, net of Gramm - Rudman - Hollings reductions, $33.7 million is available. An additional $11.9 million is available in 1991 to complete the grant cycle beginning in January of 1990.

Mr. Hoyer: How many grantees were funded last year, and how many lost their federal funding or received only phase out funding as a result of the shortfall in the FY 1990 appropriation?

Dr. Harmon: During fiscal year 1989, 109 grantees were supported. In 1990, 92 grantees are being provided a full year of support. An additional 17 awards are being supported for a three month period to provide for the orderly phaseout of Federal support and to continue operations through the colder months.

Mr. Hoyer: Considering the great swings in this appropriation since 1987, it appears that the Bureau of Health Care Delivery and Assistance went to great lengths to help stabilize and maintain funding for the grantees under this program.

Why did the Bureau choose to defund projects receiving grants in this program at the end of last year rather than attempt a strategy that would help continuing services to the homeless population pending availability of the advanced funding that Congress provided?

Dr. Harmon: The goal of the Bureau when making funding decisions was to support the provision of services to the greatest number of homeless individuals, not necessarily to continue all homeless projects. If a policy of prorata reductions were pursued, the loss in service capacity would have been a minimum of 32,000 users. It is estimated that by defunding the less effective grantees the loss in service capacity will amount to about 17,000 users between April 1 and September 30.

The shortfall in funding was not only a result of not having all funds available in 1990. The Gramm-Rudman-Hollings reductions, and the need to fund some grantees for a ten month period during 1990 because they had December 1 start dates also reduced the amount of money available to continue existing grantees.

Mr. Hoyer: How is the Bureau allocating the funds that are available from grantees as carry-over funds this year -- are those funds being used to help extend funding to the phase-out projects?

Dr. Harmon: Unused grantee balances will be used to restore a portion of the reductions made to base funding levels and provide funding for mandatory cost increases for some grantees, and to extend some of the 17 grantees currently receiving phaseout funding.

Mr. Hoyer: Does the Bureau have any projections on how many of the defunded projects will actually close their doors?

Dr. Harmon: Not at this time.

Mr. Hoyer: The justification indicates that fewer persons were served in 1990 than in 1989 and fewer still in 1991 are projected to be served, but aren't those projections for FY 1991 based on funds that are not requested in this budget?

Dr. Harmon: The projection for the number of homeless served in the budget request assumes that funds will be available in 1992 to complete the grant cycle beginning in January of 1991. This funding is not included in the request.

Mr. Hoyer: How much more would it take to fully fund the projects that received three month phase-out grants through the end of the fiscal and calendar years?

Dr. Harmon: About $3.3 million in 1990 and 1991. This amount would be in addition to the amounts required to restore the base funding reductions and mandatory cost increases that were not allowed in the initial award.

Mr. Hoyer: How much would it cost to restore the base for the projects that received less this cycle than they received last year?

Dr. Harmon: To restore base reductions for 18 grantees would require about $1.2 million. An additional $550 thousand would be required to restore mandatory cost increase funding that was disallowed in the original award.

Mr. Hoyer: How much would it take to fund new approved applications?

Dr. Harmon: To fund the new and approved applications would require about $6.5 million.

COMMUNITY HEALTH CENTERS

Mr. Hoyer: How much of the cost of care for the 38,000 AIDS patients who will be served by the CHCs is covered by the $13.3 million request for Community Health Center AIDS programs?

Dr. Harmon: The Community Health Centers will treat approximately 38,000 patients with the requested FY 1991 $13.3 million. This equals about $350 per patient per year in grant dollars. The average patient grant cost should not be viewed as the total cost of treating an HIV/AIDS patient. Two factors will affect the proportion covered by the grant dollars, revenues from services rendered and case mix.

The grantees are expected to collect fees from private and government reimbursement sources. The revenues from these sources will have to be aggressively pursued. This maximizes the grant dollars available to the CHC for covering the costs of care. There are wide differences between State Medicaid rates, differences in coverage for preventive care for both Medicaid and private carriers, and differences for therapeutic services. The reality is that many of the persons currently with HIV infection will not have any third party coverage, either Medicaid or private. Traditionally, 40 percent of the CHC population is above the poverty line and without private insurance. The grant dollars will represent widely varied proportions of the costs of care based on limited or no coverage from third party sources.

The second factor is the case mix of patients seen. Many of the patients seen will be asymptomatic for AIDS but in fact be infected with HIV. The status of the patient in the progression of the disease will dictate the types and number of services received. Two of the general grant program goals are to identify the high risk groups within the CHC to whom HIV prevention options will be given and to engage the already infected patients into a regular program of care. It is the mix of these patients that will determine the proportionate costs borne by the grant and the reimbursement possible. As previously noted, many funding sources do not recognize prevention or prophylaxis as covered services; the grant will assume a greater proportion of the more preventive or early intervention services.

Mr. Hoyer: Are AIDS cases a growing proportion of the CHC patient load in terms of the number of medical encounters or the proportion of resources and time required to treat them?

Dr. Harmon: The persons infected with HIV are a growing proportion of the resources expended in the CHC. Their numbers are increasing because more CHCs have begun HIV related services. Each patient with HIV infection has to be viewed as having a progressive disease that demands quality care to prevent further disease involvement. Further deterioration means that the clinical management will require more frequent patient visits, more diagnostic and monitoring procedures, and more pharmaceutical. The chronic nature of the disorder is costly in terms of physician time, medical support staff (nurses, social workers), and for laboratory and pharmacy cost centers. Quality case management for these patients is required to ensure that the treatment plan is appropriately followed; this case management is expensive as it is person and time intensive.

AIDS SERVICE DEMONSTRATION PROJECTS

Mr. Hoyer: The Presidential AIDS Commission and the Institute of Medicine both regard the service demonstration projects as a priority.

What has happened to the original grantees (Miami, NY, San Francisco, and Los Angeles) funded through this program in the latest funding cycle?

Dr. Harmon: In Fiscal Year 1989, the four original grantees were funded as follows:

Miami	$1,067,288
New York	$2,908,823
San Francisco	$1,427,846
Los Angeles	$2,000,000

Three of the grantees, Miami, New York and San Francisco, have project periods that extend through September 30, 1992. The project period for Los Angeles extends through September 30, 1990.

Mr. Hoyer: Can you explain how the $19.4 million in funds requested for FY 1991 will be apportioned among grantees, including the original funded projects?

Dr. Harmon: There are currently twenty-five HIV Services Demonstration projects. As noted in the budget justification, $11,709,000 would be used for non-competing grants to seven of these projects, including three of the original four. These projects include New York, San Francisco, Miami, Baltimore, Detroit, Denver and Jersey City. The remaining amount, $7,715,000, would provide for between nine and eleven competitive grant awards to the remaining eighteen projects. The total requested, $19,424,000 is expected to provide support for between sixteen and eighteen of the existing 25 projects.

PEDIATRIC AIDS DEMONSTRATIONS

Mr. Hoyer: Is the $14.8 million for these demonstrations the same level that was requested of the Department and OMB?

Dr. Harmon: During the Department's development of the fiscal year 1991 budget, various levels were discussed before the final Administration request for the Pediatric AIDS program, $14.8 million, was forwarded to Congress.

While this level, $14.8 million, is the same amount available for fiscal year 1990, this figure reflects a reduction of approximately $200,000 due to the effects of a Gramm-Rudman-Hollings sequester in fiscal year 1990.

The PHS request to the Department was $15 million and the Department requested $8.3 million for Pediatric AIDS.

Mr. Hoyer: What proportion of these funds will be used to carry on current rather that new initiatives?

Dr. Harmon: It is estimated that most of these funds, approximately $12 million, will be needed in fiscal year 1991 for continuation projects in Pediatric AIDS.

This figure would be comprised of about $7 million in service demonstration projects, the current program priority, and about $5 million in two new initiatives -- national issues and comprehensive centers. The two new initiatives will be added to the program in fiscal year 1990.

The remaining fiscal year 1991 funds requested, approximately $2 million, would be used to expand current program capacity and to establish projects in areas of emerging need.

EMERGENCY MEDICAL SERVICES FOR CHILDREN

Mr. Hoyer: The Budget Justification refers to the SPRANS programs as providing the same services as the childrens' EMS program funded at $3.9 million last ~~week~~ year, but there is no increase in the SPRANS set aside funds. Maryland has one of the best systems of emergency response in the country, and I know that this project helped my state achieve that success.

Did the MCH Budget that went to the Secretary include these funds?

Dr. Harmon: No funds were requested by the PHS for Pediatric EMS. Since many of the activities funded under the Pediatric EMS program could also qualify for funding under the SPRANS set-aside and for the ongoing maternal and child health block grant program, it was the final decision of the Administration not to recommend fiscal year 1991 funding for this program.

MINORITY HEALTH INITIATIVE

Mr. Hoyer: The initiative includes $35 million for health services to underserved neighborhoods. I of course applaud the goal.

Isn't it the case, however, that proximity of services does not always ensure genuine access? There are other barriers to full participation in the health care system besides distance.

Dr. Harmon: The proximity of service is a prerequisite for, but not a guarantee of, access. As with all BHCDA supported primary care services, the minority health initiative for health services to underserved neighborhoods will ensure access by:

- o having operations during hours convenient for the population in need;
- o encouraging representation from the community in the form of a community governing board or other comparable mechanism to ensure that services provided in a culturally acceptable manner;
- o utilizing aggressive outreach with community volunteers and staff who are attuned to minority health issues and incorporating transportation where needed;
- o sensitive application of a sliding fee scale so that there is no financial barrier to care;
- o use of "one stop shopping approach" for enrollment in programs like Medicaid, WIC, AFDC and delivery of services such as mental health, substance abuse, developmental child care and social support;
- o and integration of preventive care, health education and case management (including referral arrangements for

tertiary care).

HEALTH SERVICES RESEARCH & DELIVERY

Mr. Hoyer: There is a $44.4 million decrease in the area of Health Services and Delivery for AIDS, including the funding for AZT.

Could you define the beneficiary population for the AIDS drug funds, and to what extent has the eligible population received financial support through this program?

Dr. Harmon: The beneficiary population are people with HIV infection who are low-income and not covered by Medicare, State Medicaid programs, or other third-party payors (e.g., insurance companies), or whose State Medicaid program or other insurance does not provide the appropriate drug coverage. Each State must define low-income for the purpose of the AIDS Drug Reimbursement Program, and may include the use of a sliding income scale and provisions for copayments by patients.

As of the end of FY 1989, the States report that almost 18,000 people have benefitted from this program. However, we do not know the extent to which all of the eligible individuals were assisted. This is because of the absence of accurate data on 1) the proportion of those individuals with AIDS who are medically qualified for each drug covered under the program, and 2) the proportion of these medically-eligible infected patients who are economically and otherwise eligible for this program.

Mr. Hoyer: Although you've stated that most states have an AIDS drug benefit, will they make up the shortfall if there is no Federal program?

Dr. Harmon: Of the eleven States which received about 85 percent of the funds distributed under the AIDS Drug Reimbursement Program, seven had State-authorized programs. Generally, they were enacted to provide continuing help to clients during any interruption in the availability of Federal funds. These programs vary widely in the amount of funds available and the amount of coverage provided.

Mr. Hoyer: How much of an increase is provided for AIDS behavioral research, and is that an adequate allocation?

Dr. Harmon: An increase of $395,000 is provided for AIDS behavioral research. This funding level will enable increased research efforts at understanding the patterns and determinants of high risk behavior and will expand studies to prevent HIV/AIDS high risk behaviors. In addition, increased emphasis will be placed on identifying special populations at risk--black and Hispanic gay and bisexual men, low-income and low-education individuals, homosexual adolescents, intravenous drug users (IVDU's), and people using drugs and alcohol during sexual activity.

Mr. Hoyer: The Justification indicates that Medicaid covers 40 percent of AIDS patients and that 25 percent of all health care costs for AIDS are covered by the program.

How good is the research on the costs of care for different categories of individuals who are-infected with AIDS -- How much do we really know?

Dr. Harmon: A study which was printed in The New England Journal of Medicine describes the different categories of Federal spending. The information follows:

FEDERAL SPENDING FOR ILLNESS CAUSED BY THE HUMAN IMMUNODEFICIENCY VIRUS

William Winkenwerder, M.D., Austin R. Kessler, M.B.A., and Rhonda M. Stolec, B.S.E.

Abstract Is the federal government devoting sufficient resources to fighting the epidemic of human immunodeficiency virus (HIV) infection, and are these resources being spent appropriately? Some observers contend that the amounts have been inadequate, but until now there has been no overall accounting of federal activities and spending to combat the epidemic. We report expenditure data collected from federal agencies for the years 1982 to 1989. In all, $5.5 billion will have been spent on HIV-related illness during this period by the federal government, nearly 60 percent of it by the U.S. Public Health Service.

Federal spending on HIV-related illness in 1989 will reach $2.2 billion, representing over one third of all estimated national (public and private) HIV expenditures, and tripling state expenditures. In 1992, federal spending on the epidemic will reach an estimated $4.3 billion. Although sizable, this will be just 1.8 percent of all 1992 federal health dollars. Similarly, in 1992, national (public and private) spending on HIV-related illness will consume roughly 1.6 percent of all health-related costs in the United States.

Federal spending for HIV research and prevention is similar to funding for other major diseases, including some conditions, such as cancer and heart disease, that now have a greater impact on mortality. (N Engl J Med 1989; 320:1598-603.)

THE cumulative number of reported cases of the acquired immunodeficiency syndrome (AIDS) now exceeds 90,000 and is projected by the Centers for Disease Control to reach 365,000 by the end of 1992.[1,2] Furthermore, it is estimated that 1.0 to 1.5 million Americans are infected with the human immunodeficiency virus (HIV) and that eventually most of them will become ill and require care.[2] The current and future costs occasioned by HIV-related illness are the subject of much debate, but most would agree that billions of dollars will be needed by the early 1990s.[3-6]

According to several observers, the federal response to the epidemic has been inadequate and substantially more resources are needed. Recent reports by the presidential commission on the HIV epidemic,[7] the Institute of Medicine,[8] and the General Accounting Office[9] call for substantially increased federal appropriations (from hundreds of millions of dollars to billions) for AIDS-related activities.

In view of such assessments, we sought to summarize the state of the federal government's spending on HIV-related illness and to examine likely future trends. This information may enable leaders in politics and health care to address several important policy questions more effectively. Has enough federal money been spent to date on AIDS programs? If not, where should more be spent? What proportion of future monies should come from the federal government? How should federal resources earmarked to fight HIV be balanced against those set aside to combat other major diseases?

In this article, we report total federal spending related to HIV for the period 1982 through 1989. In addition, we project the level of such spending through 1992. We also examine the levels of federal spending for HIV-related matters in the context of total federal spending in all areas of health care, the budget of the Public Health Service, and aggregated national (public and private) spending for health care. Finally, we compare federal expenditures for AIDS research, education, and prevention with the amounts allocated for other major diseases in the United States.

Methods

Spending on the HIV epidemic is presented according to department of the federal government and functional category — research, education, and prevention (including testing), direct medical and other care, or disability assistance. All amounts reported are for fiscal years (October 1 to September 30), unless otherwise noted. Most amounts represent actual appropriations by Congress. Because many federal HIV-related efforts are part of broader appropriations or entitlement programs in which no separate accounting of HIV-related expenditures is maintained, some amounts shown are estimates prepared by agency actuaries or budget officials. In this article, we summarize such estimates and describe the methods by which they were derived.

The amounts reported for all agencies of the Public Health Service were actual appropriations by the U.S. Congress. The amounts reported for the programs of the Health Care Financing Administration and the Social Security Administration were developed by actuaries and budget officials at those agencies. The estimates by the actuary at the Health Care Financing Administration were obtained by the following method. All figures represent costs associated with AIDS cases and do not account for costs associated with HIV-related illnesses that have not yet progressed to AIDS as defined by the Centers for Disease Control. Estimates of the number of cases of AIDS through September 1987 were based on data reported to the Centers for Disease Control, with adjustment for delays in reporting and cases not reported. Cases reported after September 1987 reflect the revised surveillance definition of AIDS prepared by the Centers for Disease Control and are based on projections developed in June 1988 by the Public Health Service.[2]

Medical cost factors derived from the work of Scitovsky et al.[10] were applied to the projections of the AIDS caseload to obtain

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The opinions expressed in this article are solely those of the authors and do not necessarily represent the views of the Southeast Permanente Medical Group, the University of Pennsylvania, the Department of Health and Human Services, or any other federal agency.

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estimates of direct medical costs, excluding the effect of zidovudine. To account for zidovudine, it was assumed that two thirds of the persons with AIDS received the drug at an annual cost of $8,000 and that zidovudine increased survival after diagnosis by an average of six months (Klemm J [Health Care Financing Administration, Office of the Actuary]: personal communication).

The federal proportion of the total direct medical costs underwritten by the federal–state Medicaid program was obtained by multiplying the proportion of patients with AIDS estimated to be enrolled in Medicaid (40 percent), the proportion of the total direct medical costs covered by Medicaid (58 percent), and the percentage of the Medicaid costs for AIDS paid by the federal government (51 percent).

To estimate the Medicare costs, the total direct medical costs were multiplied by the fraction of the patients with AIDS estimated to have Medicare coverage (1 percent before 1987, rising to 4 percent in 1992) and the proportion of total costs paid by Medicare (60 percent).

The cost estimates prepared by the actuary at the Social Security Administration were based on the following methods. Annual projections of the numbers of new diagnoses of AIDS and of deaths from AIDS in past and future periods were derived from the model developed in the Office of the Actuary at the Health Care Financing Administration.

Cost estimates for the Disability Insurance program were based on actual claims by disabled workers with AIDS, as derived from a sample of the 1987 Master Beneficiary Records that was augmented by a review of the records of individual claims. Estimates of the size of the cohorts entitled to benefits and their survival rates were made with a survival model that was fitted to the observed claims by a weighted least-squares regression technique. An estimate of benefit payments from 1984 through 1992 was made.[11]

The past HIV-associated costs incurred by the Supplemental Security Income program (1982 through 1987) were estimated from a random sample of the 1985 and 1986 administrative records, as well as a 100 percent sample of the records from December 1987, which were searched for cases of AIDS-related disability. Cost forecasts were based on the records of the benefits received for historical periods, without consideration of possible new AIDS treatments or changes in the definition of disability.

The expenditures of the Department of Veterans Affairs for research, education, and prevention were estimates provided by department budget and program officials. Treatment costs assume an annual cost per person of $24,000 for the period 1983 through 1987, increasing to $30,000 in 1988. It was assumed that, beginning in 1987, half the patients treated by the Department of Veterans Affairs would require zidovudine, at a cost of $6,600 per patient per year.

Estimates of annual expenditures for HIV-related purposes by the Department of Defense from 1982 through 1989 were prepared by the U.S. Office of Management and Budget. The expenditures shown for research were actual appropriations, whereas those for education and prevention were estimated by the Department of Defense. Medical service costs could not be determined directly, but were estimated to be the difference between the estimates of total expenditures and the amounts estimated for research and prevention.

The expenditures reported through 1989 for the Departments of Agriculture, Education, Justice, Labor, and State were estimated by those departments.

RESULTS

Federal spending from 1982 through 1989 for HIV-related purposes is summarized in Table 1* — a total of approximately $5.5 billion. The Department of Health and Human Services accounts for the largest share of the spending — nearly 90 percent of all funds to date. However, a number of other federal departments and agencies, most notably the Department of Veterans Affairs and the Department of Defense, are engaged in treatment, research, education, and prevention activities.

Table 1. Federal Spending for AIDS According to Department.

	1982	1983	1984	1985	1986	1987	1988	1989	TOTAL	PERCENT
	*millions of dollars**									
Department of Health and Human Services										
Public Health Service										
National Institutes of Health	3	22	44	64	135	261	468	604	1600	29
Centers for Disease Control	2	6	14	33	62	136	305	379	938	17
Alcohol, Drug Abuse, and Mental Health Administration	0	1	3	3	12	48	112	174	352	
Health Resources and Services Administration	0	0	0	0	15	42	37	55	149	
Food and Drug Administration	0	0	1	9	10	16	30	63	129	
Other Public Health Service	0	0	0	0	0	0	4	14	19	
Subtotal†	6	29	61	109	234	502	957	1289	3186	58
Health Care Financing Administration	0	10	30	75	140	215	360	546	1376	25
Social Security Administration	0	0	6	13	33	51	88	138	329	
Other	0	0	0	0	0	0	3	6	9	
Subtotal	6	39	97	197	407	769	1408	1979	4901	89
Department of Veterans Affairs	0	5	6	10	23	54	83	144	325	
Department of Defense	0	0	0	0	79	74	52	67	272	
Other departments	0	0	0	0	1	2	5	4	12	
Subtotal	0	5	6	10	102	130	140	216	609	11
Grand total	6	44	104	207	509	899	1548	2195	5511	100
Annual percent change	—	687	137	100	146	77	72	42	—	

*Dollar amounts are rounded to nearest million. Because of rounding, columns may not add to totals shown.

†Subtotals are shown to illustrate the expenditure of the Public Health Service but are not to be added to the other values in arriving at the total below.

When spending is summarized according to functional category for the same period (Table 2),* it is clear that there will have been twice as much spending on research ($2.2 billion) as there has been for education and prevention ($1.1 billion). Spending for medical care, primarily by entitlement programs, accounts for $1.9 billion. Cash-assistance payments to disabled patients with AIDS are comparatively small ($0.3 billion), but are growing as more HIV-infected persons become ill. The following summary highlights the activities underlying the expenditures shown in Tables 1 and 2, beginning with the large number of agencies grouped under the umbrella of the Department of Health and Human Services.

Public Health Service

By the end of 1989, agencies of the Public Health Service will have spent nearly $3.2 billion (58 percent of the total) on HIV-related activities, with $1.3 billion spent in 1989 alone. The programs funded by the 1989 AIDS budget of the Public Health Service require 1700 full-time employees.

The National Institutes of Health account for half of the cumulative Public Health Service spending on

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in the range of $2.2 billion, or approximately 13 percent of the Public Health Service budget.

Currently, federal expenditures for AIDS make up about 1 percent of all federal health expenditures, but they are likely to increase to 1.8 percent by 1992 (Table 3). According to the calculations of Scitovsky and Rice,[3] total U.S. AIDS expenditures (public and private) now constitute about 0.8 percent of all U.S. health care spending; we estimate that this amount will grow to 1.6 percent by 1992 (Table 3).

Table 4 compares federal spending on research, education, and prevention for AIDS with that for other major diseases, and Table 5 compares the actual and projected mortality rates of AIDS with those of other major diseases in the United States. As shown in Table 4, federal expenditures for AIDS research and prevention will total $1.3 billion in 1989. That year, estimated federal spending on cancer research and prevention will approach $1.5 billion (Table 4). But cancer is expected to cause nearly 500,000 deaths in 1989, whereas fewer than 35,000 deaths from AIDS are expected (Table 5). Similarly, 777,000 people are projected to die from heart disease in 1989 (Table 5), but federal spending in 1989 to combat heart disease is less than that to combat AIDS.

Other comparisons are worth noting. Diabetes, for instance, is roughly comparable to AIDS in terms of mortality, morbidity, and medical economic impact; in 1984, about 5.8 million Americans were known to have diabetes, 36,000 deaths were directly attributed to it, and the direct medical expenses were an estimated $7.5 billion.[12] The level of spending in 1989 by the Public Health Service for diabetes will be $267 million, however — far less than that for AIDS. Similarly, in 1985 more than 153,000 people died of stroke or hypertension (Table 5), but Public Health Service spending for these two conditions in 1989 will be $182 million.

Finally, of the $4.4 billion in public and private expenditures estimated for AIDS in 1988, approximately $1.5 billion, or 35 percent, came from the federal government (Table 3). This compares with 30 percent for health care in general.[13] In addition, federal spending on AIDS in 1988 was more than three times that of the states, which spent an estimated $480 million, including the state share of Medicaid costs.[14]

Table 4. Federal Spending in Fiscal Year 1989 for Research on, Education about, and Prevention of Major Diseases.

	millions of dollars
Cancer*	1449
AIDS and HIV†	1306
Heart disease‡	1008
Diabetes§	267
Stroke and hypertension§	182
Alzheimer's disease§	127

*Total National Cancer Institute appropriations for 1989, minus the amount devoted to AIDS-related activities. This figure may underestimate the true total federal expenditure (complete data are not available).

†From Table 2.

‡Total National Heart, Lung, and Blood Institute appropriations for 1989, minus the amount devoted to AIDS-related activities. This figure may underestimate the total federal expenditure.

§From Public Health Service estimates of 1989 obligations, as reported to the Congress in "Justification of Appropriations Estimates for Committee on Appropriations, Fiscal Year 1990," Vol. VIII and IX. This figure may underestimate the total federal expenditure.

Table 5. Gross Numbers of Deaths According to Disease in the United States.*

CALENDAR YEAR	HEART DISEASE	CANCER	CEREBROVASCULAR DISEASE	COPD† AND ALLIED CONDITIONS	HIV-RELATED ILLNESS
Actual					
1984	765,114	453,492	154,327	69,100	2,922
1985	771,169	461,563	153,050	74,662	5,875
1986	768,350	465,980	147,790	75,420	10,324
Estimated					
1987	773,021	477,248	144,530	79,727	16,369
1988	775,341	485,901	141,325	83,194	24,750
1989	777,626	494,422	138,169	86,609	34,388
1990	779,868	502,782	135,072	89,959	44,644
1991	782,057	510,945	132,049	93,230	55,142
1992	784,185	518,882	129,109	96,411	65,402

*Data on all diseases except HIV-related illness were provided by the National Center for Health Statistics for 1984 and 1985 and were prepared in preliminary form by the National Center on Health Statistics for 1986, with use of a 10 percent national sample. Estimates for 1987 through 1992 were projected by a simple linear model with the assistance of the Division of Technical Support, Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services. Adjusted actual and projected data on HIV-related illness were provided by the Statistics and Data Management Branch, AIDS Program, Centers for Disease Control.

†COPD denotes chronic obstructive pulmonary disease.

DISCUSSION

By the end of 1989, more than $5.5 billion will have been spent by the federal government for AIDS since 1982. Of this amount, nearly 90 percent will have been spent by the Department of Health and Human Services, and nearly 60 percent by the Public Health Service. In the early 1980s, levels of spending were small relative to the size of the ensuing epidemic, but spending has grown substantially since 1986. This rapid growth is likely to continue in the next few years. Under conservative assumptions, federal AIDS spending is likely to reach $4.3 billion in 1992 — a sum that though sizable in absolute terms, would represent less than 2 percent of total federal health costs.

Even if the level of discretionary spending is lower in the future than we project, the federal government will continue to bear a major financial burden for medical care and disability assistance, because so many patients with AIDS are eligible for federal entitlement programs (Medicaid, Disability Insurance, Supplemental Security Income, or programs of the Department of Veterans Affairs). Current levels of federal funding for AIDS research, education, and prevention are comparable with the amounts budgeted for other major diseases, most of which will continue to have a far greater effect on U.S. mortality. AIDS spending in 1989 makes up 9.6 percent of the total budget of the Public Health Service, whose responsibilities extend to all categories of illness. By 1992, this share is projected to increase to nearly 13 percent (Table 3).

Despite the large and growing level of spending, some observers argue that even higher levels are

Table 2. Federal Spending for AIDS According to Type of Activity.

	1982	1983	1984	1985	1986	1987	1988	1989	TOTAL	PERCENT
					millions of dollars					
Research										
Public Health Service	3	22	57	83	164	317	607	815	2067	
Defense Department	0	0	0	0	38	22	12	27	98	
Department of Veterans Affairs	0	0	2	3	3	6	8	14	34	
Other	0	0	0	0	0	1	1	1	2	
Subtotal	3	22	59	86	204	345	626	856	2201	40
Education and prevention										
Public Health Service	2	7	4	25	55	145	321	388	947	
Defense Department	0	0	0	0	18	25	26	26	94	
Other	0	0	0	0	0	2	8	37	47	
Subtotal	2	7	4	25	73	172	354	450	1088	20
Medical care										
Medicaid (federal share)†	0	10	30	70	130	200	330	490	1260	
Department of Veterans Affairs	0	5	5	8	20	47	74	103	261	
Public Health Service	0	0	0	0	16	41	29	87	173	
Defense Department	0	0	0	0	23	27	15	15	80	
Medicare†	0	0	0	5	10	15	30	55	115	
Other	0	0	0	0	1	1	1	2	4	
Subtotal	0	15	35	83	199	331	480	751	1893	34
Cash assistance										
Disability Insurance†	0	0	5	10	25	40	70	110	260	
Supplemental Security Income	0	0	1	3	8	11	18	28	69	
Subtotal	0	0	6	13	33	51	88	138	329	6
Grand total	6	44	104	207	509	899	1548	2195	5511	100

*Dollar amounts are rounded to nearest million. Because of rounding, columns may not add to totals shown.

†Estimates on these lines have been rounded to the nearest $5 million by actuaries at the Health Care Financing Administration and the Social Security Administration.

AIDS ($1.6 billion) and 29 percent of the cumulative federal spending on AIDS to date. Sixteen institutes — and nearly 800 workers — are involved in HIV research and education. The research efforts have primarily addressed the pathogenesis and clinical manifestations of HIV infection and the discovery and development of anti-HIV drugs. Approximately 600 grants for basic research, worth almost $240 million, are being awarded in 1989. More than 7800 patients are participating in 82 trials supported by the institutes, and 35 other protocols are under development.

The Centers for Disease Control account for 30 percent of the cumulative AIDS appropriations of the Public Health Service through 1989 ($938 million). The agency is responsible for HIV and AIDS case-surveillance activities, epidemiologic studies, monitoring of trends, and public information and education. HIV-related activities now consume nearly 40 percent of the budget of the Centers for Disease Control and the efforts of 525 workers. In 1989, almost $60 million will be used in projects to determine HIV seroprevalence in a national sample of 42 hospitals and 30 metropolitan areas.

The Alcohol, Drug Abuse, and Mental Health Administration, with 11 percent of the cumulative AIDS appropriations of the Public Health Service ($352 million), conducts research, provides intravenous drug abusers and their sexual partners with HIV-related information and treatment, and trains drug abuse counselors and health care workers in the psychosocial aspects of AIDS. Over 40 percent of the 1989 budget of the National Institute on Drug Abuse will be used for AIDS.

The Health Resources and Services Administration ($149 million) funds a broad range of AIDS programs relating to the delivery of health services and patient care, including demonstration projects in 21 cities that examine models of appropriate, cost-effective community care for adults with AIDS.

The Food and Drug Administration ($129 million) is responsible for evaluating and approving all newly developed AIDS drugs and biologic agents, AIDS vaccines, and HIV diagnostic tests. This agency also regulates blood banks and attempts to ensure that the nation's blood supply is safe from HIV and that condoms and rubber gloves are effective. Approximately 60 percent of the 1989 budget of the Food and Drug Administration for AIDS will be used to evaluate potential new therapies and vaccines.

Other Public Health Service funds are devoted to the overall coordination of AIDS activities by the National AIDS Program Office, research on the costs and financing of AIDS care by the National Center for Health Services Research, and various education and prevention measures carried out by the Office of Minority Health and the Indian Health Service.

Health Care Financing Administration

The Health Care Financing Administration, which administers the Medicare and Medicaid programs, funds a sizable proportion of the costs of AIDS treatment. Medicaid is financed by both the state and federal governments, and 51 percent of the AIDS costs are federally supported. Medicaid is estimated to cover about 40 percent of all patients with AIDS and about 25 percent of the total U.S. cost for AIDS-related personal health care. The cumulative federally financed Medicaid costs for AIDS to date are estimated at $1260 million and will reach $490 million in 1989 alone.

Because of patient demographics and rules governing disability entitlement, Medicare currently pays 1 to 2 percent of all AIDS health care costs. As life expectancies are extended with zidovudine and other new therapies, the costs borne by Medicare are expected to rise.

Social Security Administration

Two programs provide cash assistance to persons with AIDS or HIV-related illnesses — Disability Insurance and Supplemental Security Income, with $260 million and $69 million in cumulative expenditures to date, respectively. Persons meeting the Centers for Disease Control's definition of AIDS automatically qualify as disabled, since the definition is the same in both programs. Patients who do not meet this definition but have HIV-related illness are evaluated for eligibility on a case-by-case basis.

Disability insurance is available only to disabled people with a sufficient work history. Supplemental Security Income, on the other hand, is available to all disabled persons with income and assets below certain levels. Through the end of 1988, approximately 42,000 persons with HIV-related illness had received cash payments from these two programs.

Other Health and Human Services Offices

The Office of Human Development Services is funding grants to develop models for providing care and support services to children with AIDS and their families. The Office of the Assistant Secretary for Planning and Evaluation has also funded studies of various aspects of AIDS. The Office of Civil Rights conducts educational programs and investigates allegations of discrimination against persons with AIDS.

Other Departments

The Department of Veterans Affairs provides medical care to veterans with AIDS, who make up an estimated 7 percent of all patients with AIDS. As of April 1989, Department of Veterans Affairs medical centers had treated 6400 persons with AIDS. The department also funds basic and clinical AIDS research and a variety of programs of education and prevention. Since 1982, the department has spent an estimated $325 million on AIDS-related activities.

The expenditures of the Department of Defense, which total $272 million, are mostly for the HIV testing of active personnel and recruits. Testing is mandatory for all recruits and all active-duty and reserve personnel. An estimated 4 million people were tested in 1986 and 1987, at a cost of $40 million. In addition, the department has received appropriations of $98 million for AIDS research from 1986 through 1989. An estimated 2100 active-duty personnel, 0.1 percent of the armed forces, have been infected with HIV. Persons in whom HIV-related illness develops are placed on temporary-disability status and are ultimately discharged for medical reasons. In 1987, the Justice Department's Bureau of Prisons began testing all entering federal prisoners, all inmates with signs of HIV infection, and all prisoners released. The policy was later changed to stipulate random testing of 10 percent of the entering prisoners, while testing in the other groups remained unchanged. The Bureau also provides medical care to prisoners with HIV-related illness.

Since March 1987, all new residential enrollees in the Labor Department's Job Corps have undergone mandatory HIV testing. The Corps also provides counseling, educational programs, and limited medical care. The Occupational Safety and Health Administration, also in the Labor Department, inspects workplaces (201 in 1988) to ensure that the guidelines of the Centers for Disease Control are being followed, to minimize the risk of spreading AIDS and other diseases.

Since 1987, the State Department has administered the HIV test to refugees and persons seeking immigrant visas. The department also conducts HIV testing as part of routine physical examinations for Foreign Service officers. The Departments of Education and Agriculture have produced educational materials for constituent groups and federal workers.

Table 3. Comparisons of AIDS-Related Expenditures.[*]

	1988	1992
	billions of dollars	
Public Health Service AIDS spending	1.0[†]	2.2[‡]
Total Public Health Service spending	12.1[§]	17.1[¶]
AIDS spending (% of total)	7.9	12.9
Federal AIDS spending	1.5[‖]	4.3[**]
Total federal spending on health[††]	159.6	238.3
AIDS spending (% of total)	1.0	1.8
National AIDS spending[‡‡]	4.4	12.0
National health spending[§§]	541.7	773.0
AIDS spending (% of total)	0.8	1.6

[*] All figures given in nominal dollars rounded to the nearest 10th of a billion. Percentages were calculated with unrounded figures and cannot necessarily be replicated with use of rounded numbers.

[†] From Table 1.

[‡] As projected by assuming a 1990 funding level equal to that requested in the President's budget and growth rates of 20 percent and 15 percent in 1991 and 1992, respectively.

[§] Total Public Health Service appropriation in 1988.

[¶] Public Health Service spending for purposes other than AIDS was projected with use of the average annual compounded growth rate of such spending from 1984 through 1989 (7.1 percent), plus our estimates of Public Health Services expenditures on AIDS in 1992.

[‖] From Tables 1 and 2.

[**] As projected by adding the Public Health Service AIDS spending for 1992 to estimates by the actuaries at the Health Care Financing Administration and Social Security Administration, and our projections of all other federal spending, which assume 1989 funding levels, then 25 percent, 20 percent, and 15 percent growth in 1990, 1991, and 1992, respectively.

[††] As estimated by the Social Security Administration actuary for the 1988 Social Security Administration Trustees' Report.

[‡‡] As estimated by the Health Care Financing Administration actuary in consultation with Anne Scitovsky, using her basic methods and assumptions to project 1988 figures through 1992.

[§§] As estimated by the Health Care Financing Administration Office of the Actuary.

COST PROJECTIONS AND COMPARATIVE MEASURES

The level of future federal and total (public and private) spending for HIV-related programs depends on many factors that are difficult to predict. An effective treatment for HIV infection to prevent the onset of AIDS could result in large increases in medical costs, because thousands would enter treatment. The spread of the virus could be either more or less rapid than is now predicted. Laws could be changed so as to extend insurance coverage or grant disability status. The Public Health Service and other discretionary programs that receive annual appropriations are subject to budgetary and political pressures that cannot always be anticipated.

Recognizing such uncertainties, we nonetheless project federal AIDS spending through 1992 (Table 3).[*] The expenditures of the Public Health Service were nearly $1 billion in 1988 (7.9 percent of the Public Health Service budget). By 1992, assuming a gradual decline in the rate of spending, they are likely to be appropriate. The General Accounting Office report noted previously recommends that the Public Health Service spend an additional $400 million in 1989,[9] mainly for drug-abuse treatment. The presidential AIDS commission has also called for several hundred million more dollars and a focus on treatment for drug abuse.[7]

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[*] See NAPS document no. 04695 for five pages of supplementary material. Order from NAPS c/o Microfiche Publications, P.O. Box 3513, Grand Central Station, New York, NY 10163-3513. Remit in advance (in U.S. funds only) $7.75 for photocopies or $4 for microfiche. Outside the U.S. and Canada add postage of $4.50 ($1.50 for microfiche postage).

There are several good reasons that such additional federal AIDS outlays may be supported. First, the magnitude of the epidemic may have been underestimated, and more dollars should be committed to avoid a worst-case outcome. Second, the burden of AIDS is not captured fairly in the mortality rates, because so many young people are affected, and the indirect costs in lost years of life are great. In addition, comparisons with other major diseases, such as diabetes, may not be entirely fair, since HIV is an infectious disease that continues to spread. Furthermore, spending money on AIDS research will bring benefits for the understanding of other diseases, particularly cancer, because so much will be learned about cancer-causing viruses. Finally, the United States bears a responsibility to the world to develop a cure or a vaccine, since 5 to 10 million people worldwide are presumed to be infected, many of them from economically stricken African nations.[15]

On the other hand, a case can be made that federal spending is now sufficient and that further growth should be moderated. Were the increases in spending for AIDS to continue at recent rates of growth, their equity could be questioned, considering the relative amounts devoted to cancer, heart disease, Alzheimer's disease, alcoholism, and other illnesses. More than 63 million Americans have cardiovascular diseases, and about 30 percent of the population will eventually have cancer.[12] Smoking, a preventable health risk, is responsible for an estimated 390,000 deaths annually.[16] Alcohol abuse is linked to premature death, accidents, crime, and lost productivity, with an associated cost estimated at $117 billion in 1983.[12]

Furthermore, simply spending more money will not necessarily hasten the development of a cure. In the early 1970s, large increases in funding were devoted to the "war on cancer," but although progress was made, cures turned out to be more elusive than expected. Similarly, HIV is turning out to be far more complex than was once believed. Finally, in a large bureaucracy it is often difficult to spend effectively when budgets are being increased rapidly.

The issue of allocation of funds is equally difficult. It is notable that expenditures for research are double those for education and prevention, particularly since HIV infection is almost entirely preventable. On the other hand, messages stressing the importance of prevention are not always heeded — some people will continue to become infected despite warnings. The high level of spending for research may reflect the American tendency to devote more resources to cures than to preventions. Finally, in view of the clear link between intravenous drug abuse and HIV transmission, it is notable that only a relatively small amount has been allocated to drug abuse treatment and prevention.

We are indebted to the many persons throughout the federal government who provided assistance in collecting and analyzing budget materials and performing actuarial cost estimates; and in particular to John Klemm, Health Care Financing Administration; Eli Donkar and Kerry Weems, Social Security Administration; Richard Jacob, Office of Management and Budget; Harell Little, Public Health Service; Meade Morgan, Centers for Disease Control; Don Poppke and Dorothy Tisevich, Office of the Assistant Secretary for Management and Budget, Department of Health and Human Services; and to Donna Doetsch for assistance in the preparation of the manuscript.

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Mr. Pursell: The Administration is requesting $36 million for the Infant Mortality Prevention Initiative, a $4 million increase over FY 1990 which will support 22 additional community and migrant health centers.

What criteria will be used to determine where these 22 centers will be located?

Dr. Harmon: The principle criterion for the award of new centers is need as reflected in the service area infant mortality rate (IMR). Eligible C/MHCs must serve a community in a county with greater than the national average infant mortality (10/1000 infant deaths/live births) or provide services to a high risk ethnic, racial or age group in a service area within a county that in itself does not have a high rate of infant mortality. Documentation of risk localized to the CHCs service area validated by county officials is acceptable evidence of need for a specific population group.

In addition to documentation of need, the CHC must be well managed, and fiscally stable, with a primary care provider perinatal system of care in place, so that the addition of enhanced support services and case management can be maximally effective. The system of care should involve local hospitals, health departments, and State agencies and programs. Community Health Center proposals that meet these criteria are evaluated based on their ability to facilitate early enrollment in prenatal care, as well as continue care and support services for at risk mothers and infants. All funded centers are required to evaluate the success of their service plan in improving pregnancy outcomes and follow up.

Mr. Pursell: The Administration is requesting a $25 million increase to $579 million for Maternal and Child Health. In your testimony, you have indicated that these funds are used for three programs: State block grants, special projects of regional and national significance, and the One-stop shopping program.

Could you please describe these programs and tell the subcommittee how they differ from each other?

Dr. Harmon: The Administration's fiscal year 1991 budget request for the Maternal and Child Health Block Grant Program totals $578.6 million, an increase of $25 million over the current level. This would provide funding for three separate, but related programs --the Maternal and Child Health Block Grants to States; the Special Projects of Regional and National Significance, or SPRANS; and a special grant initiative, "one-stop shopping."

Under the Maternal and Child Health Block Grants to States, a total of $470.6 million, the same as the current level, would be available in fiscal year 1991. These funds, which are distributed to the 59 States and Outlying Areas on the basis of a formula, provide a wide range of services to mothers, children and children with special health needs, as well as providing support for program expansion, improvement and coordination.

Under the SPRANS program, a total of $83 million, the same as the current level, would be available in fiscal year 1991. This figure represents 15 percent of the total available for maternal and child health services. SPRANS funds are used for discretionary projects in the categories of research, training, genetic disease screening, hemophilia diagnostic and treatment centers and maternal and child health improvement projects for pregnant women, infants and children and children with special health care needs.

The President's fiscal year 1991 budget includes an increase of $25 million under maternal and child health services for a special grant initiative called "one-stop shopping." This program would support special project grants to States and community based organizations to improve access to prenatal and postnatal care and related services. The projects would restructure, reorganize and greatly streamline the delivery of quality health care services to pregnant women and infants. States and parts of States with above average infant mortality rates would get priority for one-stop shopping projects.

Mr. Pursell: In the area of Health Professions, the Administration has not requested funding for Nurse Training programs. Last year, Congress provided nearly $58 million for these programs.

Do you agree with the FY 1991 proposal? Did you support this recommendation before OMB?

Dr. Harmon: The Department supports the Administration's budget. The budget reflects the high priority concern about the low representation of minorities in the health professions and is committed to improving this situation realizing that restricted budget targets have created very difficult choices among competing priorities. In addition to the Administration's request of $4 million, the Department's request to OMB included $2.2 million for nurse traineeships and $800,000 for nurse anesthetists.

Mr. Pursell: Do you believe federal Nurse Training programs are essential to help solve our nursing shortage crisis?

Dr. Harmon: Federal nurse training programs are essential for helping to solve the nursing shortage. In FY 1991, the administration has proposed funding to address high priority areas such as increasing nursing opportunities for individuals from disadvantaged backgrounds as well as an Institutional Development Program which will provide capitation to nursing schools which have a majority enrollment of minority students. Also, in FY 1991 the Nursing Student Loan Revolving fund will make available approximately $13 million for loans to approximately 6,500 nursing students.

Mr. Pursell: Do you think it is wise for the federal government to end funding for Nurse Training at a time when more and more Americans will be in need of medical care as our society continues to grow older in the coming decades?

Dr. Harmon: As stated in the Report of the former Secretary's Commission on Nursing, some of the increased demand for RNs is a result of inappropriate utilization of nursing personnel. In order to enhance the adequacy of the RN supply, health care delivery organizations will need to more effectively and efficiently use and appropriate mix of nursing resources, adopt automated and other labor-saving technologies and improve management of nursing services.

While the Federal Government has limited ability to directly address these problems, the Department will continue to take steps to provide leadership in resolving them. In fact, Secretary Sullivan recently established a Commission on the National Nursing Shortage to advise him on specific projects to implement the recommendations of the former Commission. The recommended projects will target five focus areas: (1) recruitment and the educational pathway; (2) retention and career development; (3) restructuring nursing services and effective utilization of nursing personnel; (4) data collection and analysis requirements; and (5) information systems and related technology in nursing.

In each focus area, the Commission shall formulate one targeted initiative designed to improve the imbalance in the nursing labor market and provide a model for broader endeavors. In addition, it shall identify ways to promote and identify specific commitments from private sector organizations and State and local government for fulfilling the projects.

JUSTIFICATION OF THE BUDGET ESTIMATES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

HEALTH RESOURCES AND SERVICES ADMINISTRATION

Health Resources and Services

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HEALTH RESOURCES AND SERVICES ADMINISTRATION

HEALTH RESOURCES AND SERVICES

PROGRAM OPERATIONS

For carrying out titles III, VII, VIII, [X, XXIV,] 1/ XVI, and XXVI of the Public Health Service Act, section 427(a) of the Federal Coal Mine Health and Safety Act, title V of the Social Security Act, and the Health Care Quality Improvement Act of 1986, as amended, [$1,782,271,000] *$1,556,822,000,* of which [$11,885,000 for health care for the homeless shall be available for obligation for the quarter beginning October 1, 1990, and ending December 31, 1990, of which $889,000, to remain available until expended, shall be available for renovating the Gillis W. Long Hansen's Disease Center, 42 U.S.C. 247e,] 2/ *$25,000,000 of funds available under Title V of the Social Security Act shall be available, notwithstanding the provisions of Title V of that Act, for grants for One-Stop Shopping;* 3/ *and* of which [$494,000] *$488,000* shall remain available until expended for interest subsidies on loan guarantees made prior to fiscal year 1981 under part B of title VII of the Public Health Service Act [and of which $4,400,000 shall be made available until expended to make grants under section 1610(b) of the Public Health Service Act for renovation or construction of nonacute care intermediate and long-term care facilities for AIDS patients]: 4/ *Provided,* That notwithstanding section 838 of the Public Health Service Act, not exceed [$10,000,000] *$15,000,000* of funds returned to the Secretary pursuant to section 839(c) of the Public Health Service Act or pursuant to a loan agreement under section 740 or 835 of the Act [may be used for activities under titles III, VII, and VIII of the Act:] *shall first be applied to meet the obligations of the fund established by section 734 of the Act: 5/ Provided further, That of the total amount appropriated $107,000,000 shall be for minority health and shall become available when authorized by law: 6/ Provided further,* That when the Department of Health and Human Services administers or operates an employee health program for any Federal department or agency, payment for the full estimated cost shall be made by way of reimbursement or in advances to this appropriation: [*Provided further,* That of this amount, $30,000,000 is available until expended for grants to States for Human Immunodeficiency Virus drug reimbursement, pursuant to section 319 of the Public Health Service Act:] *7/ Provided further, That amounts available from Public Health Service unobligated balances shall be available to meet the obligations of the fund established by section 734 of the Act: 8/ Provided further, That in addition to fees authorized by section 427(b) of the Health Care Quality Improvement Act of 1986, fees shall be collected for the disclosure of information under the Act sufficient to recover the full costs of operating the Health Care Quality Improvement Databank, and shall remain available until expended to carry out that Act: 9/ Provided further,* That user fees authorized by 31 U.S.C. 9701 may be credited to appropriations under this heading, notwithstanding 31 U.S.C. 3302. *(Department of Health and Human Services Appropriations Act, 1990.)*

Explanation of Language Changes

1/ Title X is no longer required because the Family Planning Program is being transferred to the Office of The Assistant Secretary for Health. Also, Title XXIV is no longer required because funding for Formula Grants to States and AIDS Subacute Care is not requested in the FY 1991 budget.

2/ This language is no longer required as advance funding for the health care for the Homeless and funds for Buildings and Facilities are not being requested.

3/ The language for the "One-Stop Shopping" initiative would allow implementation of the program in aiding States and community-based organizations to further enhance access to prenatal care and related services.

4/ This language is not required for the renovation or construction of non-acute care intermediate and long term care facilities for AIDS patients, since the monies are available for one year only.

5/ HRSA proposes to transfer funds collected from the Health Professions and Nursing Student Loan revolving funds for the Student Loan Insurance Fund of the Health Education Assistance Loan program if necessary, without respect to funding Section 838 of the PHS Act.

6/ This language allows the Health Resources and Services Administration to address the disparities in the health status of minorities and their underepresentation in the health professions by funding the Minority Health Improvement Initiative.

7/ This language is no longer needed as funding is not requested for this activity. The States are responsible in the Administration of the drug reimbursement program (through Medicaid program). A number of HIV treatment drugs are available through third-party insurers and State Medicaid programs.

8/ Allows HRSA to use unobligated balances within the PHS to meet obligations of the Student Loan Insurance Fund.

9/ The language provides for the National Practitioners Databank to be completely self-financed thru the creation of user fees and would be available until expended.

HEALTH RESOURCES AND SERVICES
Language Analysis

Language Provision	Explanation
Of which $25,000,000 of funds available under Title V of the Social Security Act shall be available, notwithstanding the provisions of Title V of that Act, for grants for One-Stop Shopping;	The langauge for the "One-stop Shopping" initiative would exempt these funds from the Block Grant (85 percent/ SPRANS 15 percent) distribution required by Title V (as amended) and suppport a special grant initiative targeted at improving the delivery of health care services for pregnant women and infants.
Provided, that notwithstanding Section 838 if the public Health Service Act, not exceed $15,000,000 of funds returned to the Secretary pursuant to section 839(c) of the Public Health Service Act or pursuant to a loan agreement under section 740 or 835 of the Act shall first be applied to meet the obligations of the fund established by section 734 of the Act.	HRSA proposes to use funds collected from the Health Professions and Nursing Student loan revolving funds and transfer to the Student Loan Insurance Fund of the Health Education Assistance Loan Program, without respect to funding Ad Hoc hospitals.
Provided, further that of the total amount appropriated $107,000,000 shall be for Minority Health Improvement Initiative, and shall become available when authorized by law.	This langauge allows the Health Resources and Services Administration to address the disparities in the health status of minorities and their underepresentation in the health professions. Specifically, the funds are intended to strengthen the the national capacity to train minority students as well a provide a great deal of care to minority population.

Provided further, That amounts available from Public Health Service unobligated balances shall be available to meet the obligations of the fund established by section 734 of the Act.	This language allows HRSA to transfer PHS unobligated balances to meet obligations to the Student Loan Insurance Fund.
Provided further, That in addition to fees authorized by section 427(b) of the Health Care Quality Improvement Act of 1986, fees shall be collected for the disclosure of information under the Act sufficient to recover the full costs of operating the National Care Quality Improvement Databank, and shall remain available until expended to carry out the Health Care Quality Improvement Act.	The language provides for the databank to be completely self-financed thru the creation of user fees and would be available until expended.

HEALTH RESOURCES AND SERVICES ADMINISTRATION
Health Resources and Services
Amounts Available for Obligation

	1989	1990	1991
Appropriation..............	$1,613,793,000	$1,770,386,000	$1,556,822,000
Reduction pursuant to P.L. 101-239...........	---	-23,262,000	---
Reduction pursuant to P.L. 101-166...........	---	-631,000	---
Homeless advanced from 1990................	---	---	11,885,000
Real transfer from:			
Centers for Disease Control.............	4,684,000	---	---
National Institutes of Health..............	7,443,000	---	---
Alcohol Drug Abuse & Mental Health Admin....	2,150,000	---	---
Office of the Assistant Secretary for Health	165,000	---	---
Student Loan Insurance Fund................	---	130,000	---
Subtotal, adjusted appropriation...........	1,628,235,000	1,746,623,000	1,568,707,000
Comparative transfers to:			
Office of the Assistant Secretary for Health for Family Planning...	-138,320,000	-139,135,000	---
Office of the Secretary for the Working Capital Fund Regional Legal Services........	-169,000	---	---
Subtotal, adjusted budget authority..............	1,489,746,000	1,607,488,000	1,568,707,000

	1989	1990	1991
Unobligated balance, start of year....................	31,094,000	26,693,000	24,407,000
Unobligated balance, end of year....................	-26,693,000	-24,407,000	-15,844,000
Unobligated balance, lapsing	-1,936,000	---	---
Total, obligations.1/.......	1,492,211,000	1,609,774,000	1,577,270,000

1/ Excludes the following amounts for reimbursable activities carried out by this account: 1989 -- $77,118,000 and 272 FTEs; 1990 -- $91,924,000 and 261 FTEs; 1991 -- $99,301,000 and 261 FTEs.

HEALTH RESOURCES AND SERVICES

Summary of Changes

1990 Total estimated budget authority	$1,607,488,000
1991 Request	1,568,707,000
Net Change	-$38,781,000

	1990 Current Estimate Base		Change from Base	
	FTE	Budget Authority	FTE	Budget Authority
Increases:				
A. Built-in:				
1. Annualized cost of 1990 pay raise	---	106,434,000	---	+1,193,000
2. 1/2 of Pay raise cost FY 1991	---	106,434,000	---	+2,143,000
3. Absorption of 1/2 of the 1991 Pay raise	---	106,434,000	---	+2,143,000
4. Within grade increases	---	106,434,000	---	+925,000
5. One extra day of pay	---	106,434,000	---	+274,000
6. Other (FERS and FICA) increase	---	106,434,000	---	+278,000
7. FTS and Rental Costs	---	5,641,000	---	+319,000
8. Service and Supply Fund	---	9,478,000	---	+48,000
9. Other Costs	---	---	---	+368,000
Subtotal			---	+7,691,000
B. Program:				
1. Health Care Delivery and Assistance				
a. Community Health Centers	---	427,309,000	---	+11,000,000
b. Infant Mortality	---	31,579,000	---	+4,129,000
c. Migrant Health	---	47,369,000	---	+1,000,000
d. NHSC Recruitment	---	8,882,000	---	+55,000,000
e. Health Care for the Homeless Advanced Funding	---	---	---	+11,885,000
f. Health Services in Underserved Neighborhoods	---	---	---	+35,000,000
g. Hansen's Disease Center.	---	---	---	+7,273,000
Subtotal			---	+125,287,000

	1990 Current Estimate Base		Change from Base	
	FTE	Budget Authority	FTE	Budget Authority
Increases: (Continued)				
2. Health Professions				
a. Exceptional Financial Need Scholarships.......	---	6,685,000	---	+3,315,000
b. Excellence in Minority Health..................	---	9,231,000	---	+2,769,000
c. HP Institutional Devel...	---	---	---	+12,000,000
d. Disadvantaged Assistance	---	26,965,000	---	+4,613,000
e. Community Based Recruitment and Support.	---	---	---	+5,000,000
f. Nurse Disadvantaged Asst	---	2,571,000	---	+1,429,000
g. Revolving funds..........	---	(10,000,000)	---	(10,000,000)
Subtotal....................			---	+39,126,000
3. Maternal and Child Health and Resources Development				
a. Maternal and Child Health	---	553,627,000	---	+25,000,000
4. Program Management.........	1,383	93,384,000	+72	+4,320,000
5. Rural Health...............	---	3,380,000	---	+1,000,000
6. AIDS.......................	50	102,503,000	+5	---
Total Program Increases.......			+77	+194,733,000
Total Increases...............			+77	+202,424,000
Decreases:				
A. Built-in:				
1. Working Capital Fund.....	---	4,571,000	---	-1,000,000
B. Program:				
1. Health Care Delivery and Assistance				
(a) Pacific Basin Initiative............	---	336,000	---	-336,000
(b) Health Care Service in the Home..............	---	2,961,000	---	-2,961,000
(c) Nursing Loan Repayment	---	982,000	---	-982,000
(d) Hansen's Disease Ctr..	300	---	-100	-4,066,000
(e) National Health Ser. Corps.	---	41,837,000	---	-747,000
Subtotal, BHCDA.................			-100	-9,092,000

	1990 Current Estimate Base		Change from Base	
	FTE	Budget Authority	FTE	Budget Authority
Decreases:				
2. Health Professions				
(a) Health Professions and Nursing Programs..	---	175,334,000	---	-175,334,000
(b) National Practitioners Data Bank.............	---	1,974,000	---	-1,974,000
(c) Ad Hoc Hospitals......	---	1,343,000	---	-1,343,000
Subtotal, BHPr.................			---	-178,651,000
3. Maternal and Child Health and Health Resources Development				
(a) Organ Transplantation.....	---	3,948,000	---	-691,000
(b) EMS for Children..........	---	3,947,000	---	-3,947,000
Subtotal, BMCHRD................			---	-4,638,000
4. Building and Facilities......	---	877,000	---	-877,000
5. AIDS.........................	---	112,503,000	---	-39,824,000
6. Program Management...........	1,383	93,384,000	-182	-7,123,000
Subtotal, program decreases.....			-282	-240,205,000
Total decreases.................			-282	-241,205,000
Net change......................			-205	-38,781,000

Health Resources and Services Administration

Budget Authority by Activity
(in thousands)

	1989 Actual		1990 Appropriation	1990 1/ Current Estimate		1991 Estimate	
	FTE	Amount	Amount	FTE	Amount	FTE	Amount
1. HEALTH CARE DELIVERY AND ASSISTANCE							
A. Community Health Centers.............	---	411,812	133,000	---	427,309	---	438,309
B. Infant Mortality.....................	---	20,550	32,000	---	31,579	---	35,708
C. Black Lung Clinics...................	---	3,216	3,700	---	3,651	---	3,651
D. Migrant Health.......................	---	45,646	18,000	---	47,369	---	48,369
E. Health Care for the Homeless.........	---	14,820	31,115	---	33,667	---	33,667
Advance funding for 1991............	---	---	11,885	---	---	---	11,885
F. Family Planning......................	---	(138,320)	141,000	---	(139,135)	---	(141,000)
G. National Health Service Corps........	---	39,866	42,500	---	41,837	---	42,361
H. National Health Service Corps Recruitment.........................	---	7,906	9,000	---	8,882	---	63,882
I. Hansen's Disease Center..............	308	18,276	18,493	300	18,158	200	22,601
J. Pacific Basin Initiatives............	---	741	340	---	336	---	---
K. Payment to Hawaii....................	---	3,260	3,260	---	3,217	---	3,217
L. Health Care Services in the Home.....	---	2,470	3,000	---	2,961	---	---
M. Native Hawaiian Health Care..........	---	---	1,300	---	1,283	---	1,283
N. Nursing Loan Repayment...............	---	---	1,000	---	982	---	---
O. Health Services in Underserved Neigh.	---	---	---	---	---	---	35,000
TOTAL, BHCDA........................	308	571,563	782,593	300	621,231	200	739,933

Health Resources and Services Administration

Budget Authority by Activity
(in thousands)

2. HEALTH PROFESSIONS	1989 Actual FTE	1989 Actual Amount	1990 Appropriation Amount	1990 1/ Current Estimate FTE	1990 1/ Current Estimate Amount	1991 Estimate FTE	1991 Estimate Amount
A. H.P. Student Assistance:							
Exceptional Financial Need..........	---	6,578	6,805	---	6,685	---	10,000
B. H.P. Institutional Assistance:							
Excellence in Minority Health.......	---	9,396	9,396	---	9,231	---	12,000
C. HP Institutional Development Faculty.	---	---	---	---	---	---	12,000
D. Health Promotion/Disease Prevention:							
P.H. Capitation....................	---	4,698	3,000	---	2,987	---	---
P.H. Special Projects..............	---	---	850	---	834	---	---
P.H. Traineeships..................	---	2,819	3,040	---	2,948	---	---
Graduate Program Health Education...	---	1,410	1,510	---	1,483	---	---
Health Administration Traineeships..	---	470	500	---	492	---	---
Preventive Medicine Residencies.....	---	1,503	1,725	---	1,695	---	---
Allied Health Projects.............	---	---	750	---	737	---	---
E. Primary Care:							
Family Medicine Residency/Training..	---	32,142	33,350	---	32,760	---	---
General Dentistry Residency Training	---	2,606	4,000	---	3,929	---	---
General Internal Medicine & Peds....	---	17,383	18,000	---	17,683	---	---
Family Medicine Departments.........	---	6,578	6,800	---	6,680	---	---
Physician Assistants................	---	4,511	4,875	---	4,789	---	---
F. Geriatric Training and Research......	---	13,772	14,300	---	14,047	---	---
G. H. P. Special Projects...............	---	2,349	2,500	---	2,457	---	---
H. Pacific Basin MOT....................	---	741	1,660	---	1,638	---	---
I. Area Health Education Centers........	---	16,912	18,450	---	18,125	---	---
J. Border Health (HETCs)................	---	---	4,000	---	3,929	---	---
K. H.P. Analytical Studies & Reports....	---	1,879	1,879	---	1,846	---	---
L. Rural Health Interdisciplinary							
Traineeships........................	---	800	2,250	---	2,210	---	---
M. Disadvantaged Assistance.............	---	26,897	27,449	---	26,965	---	31,578
N. Community Based Recruitment							
and Support.........................	---	---	---	---	---	---	5,000

Health Resources and Services Administration

Budget Authority by Activity
(in thousands)

	1989 Actual		1990 Appropriation	1990 1/ Current Estimate		1991 Estimate	
	FTE	Amount	Amount	FTE	Amount	FTE	Amount
N. Nurse Education:							
Advanced Nurse Education............	---	17,175	13,000	---	12,771	---	---
Nurse Practitioner/Midwife..........	---	11,777	13,674	---	13,432	---	---
Nurse Special Projects.............	---	9,578	10,467	---	10,283 2/	---	---
Nurse Education Opportunities.......	---	2,394	2,617	---	2,571	---	4,000
Nurse Traineeships..................	---	12,759	13,744	---	13,501	---	---
Nurse Faculty Fellowships...........	---	1,080	---	---	---	---	---
Nurse Anesthetists..................	---	784	1,150	---	1,130	---	---
Undergraduate Nursing Scholarships..	---	---	3,000	---	2,948	---	---
Available for Health Professions Grants.........................	---	208,991	224,711	---	220,786	---	74,578
O. AD HOC Hospital Grants...............	---	1,360	---	---	1,343 3/	---	---
P. National Practitioner Data Bank......	---	2,766	2,000	---	1,974	---	---
Total, Health Professions.......	---	213,117	226,711	---	224,103	---	74,578
3. MATERNAL AND CHILD HEALTH AND HEALTH RESOURCE DEVELOPMENT							
A. Maternal and Child Health block grant.........................	---	554,268	561,000	---	553,627	---	578,627
B. Pediatrics, EMS......................	---	2,964	4,000	---	3,947	---	---
C. Health Teaching Facilities...........	---	494	494	---	488	---	488
D. Organ Procurement and Transplantation	---	4,940	4,000	---	3,948	---	3,257
TOTAL, BMCHRD......................	---	562,666	569,494	---	562,010	---	582,372

Health Resources and Services Administration

Budget Authority by Activity
(in thousands)

	1989 Actual		1990 Appropriation	1990 Current Estimate		1991 Estimate	
	FTE	Amount	Amount	FTE	Amount	FTE	Amount
5. Buildings & Facilities..................	---	889	889	---	877	---	---
6. Program Management	1,416	90,133	95,050	1,433	93,384	1,328	91,765
7. Rural Health.............................	---	1,482	3,425	---	3,380	---	4,380
8. AIDS...................................	---	59,945	114,073	---	112,503	---	72,679
9. Less transfer from revolving fund.......	---	-9,880	-10,000	---	-10,000	---	---
Total Budget Authority..................	1,724	1,489,746	1,782,271	1,733	1,607,188	1,528	1,568,707 4/

1/ This column reflects a $631,000 reduction for salaries and expenses as directed by P.L. 101-166, and a sequester of $23,262,000.

2/ P.L. 100-607 states that not less than 20 percent of funds available for Nurse Special Projects be available for Nurse Education Opportunities for individuals from disadvantaged backgrounds (Sec. 827).

3/ The HEAL Student Loan Insurance Fund was reduced $130,000 and BHPr activities were reduced line by line to fund the Ad Hoc Hospitals.

4/ Includes advanced funding for Homeless.

Health Resources and Services Administration
Budget Authority by Object

	1990 Current Estimate	1991 Estimate	Increase or Decrease
Total number of full-time permanent positions...........	1,617	1,408	-209
Total compensable workyears:			
Full-time equivalent employment	1,733	1,528	-205
Full-time equivalent of overtime and holiday hours...........	6	6	---
Average ES salary...............	$79,143	$96,555	---
Average GS grade................	10.8	10.8	---
Average GS salary (excluding benefits).....................	$42,974	$44,521	---
Average Commissioned grade, grades established by Act of July 1, 1944 (42 USC 207)..................	4.8	4.8	---
Average Commissioned salary, grades established by PHS Act of 1944 (42 USC 207)..................	$46,033	$47,874	---
Average salary of ungraded positions	$22,800	$23,712	---
Personnel compensation:			
Full-time permanent...........	$70,423,000	$68,365,000	-$2,058,000
Other than full-time permanent	11,890,000	11,009,000	-881,000
Other personnel compensation..	5,591,000	5,201,000	-390,000
Special personnel services payments	72,000	67,000	-5,000
Total personnel compensation	87,976,000	84,642,000	-3,334,000
Personnel benefits..............	18,458,000	17,758,000	-700,000
Benefits for former personnel...	1,000	10,000	+9,000
Travel and transportation of persons	4,465,000	4,426,000	-39,000
Transportation of things........	1,095,000	1,032,000	-63,000

Budget Authority by Object

	1990 Current Estimate	1991 Estimate	Increase or Decrease
Rent, communications and utilities:			
Rental payments to GSA...........	$4,592,000	$6,500,000	+1,908,000
Communications, utilities, and miscellaneous charges..........	3,393,000	3,195,000	-198,000
Printing and reproduction..........	686,000	642,000	-44,000
Other services......................	67,791,000	65,160,000	-2,631,000
Supplies and materials.............	2,074,000	1,988,000	-86,000
Equipment...........................	5,602,000	5,318,000	-284,000
Investments and loans..............	---	---	---
Grants, subsidies and contributions....................	1,411,355,000	1,378,036,000	-33,319,000
Insurance claims and indemnities...	---	---	---
Total, budget authority.......	1,607,488,000	1,568,707,000	-38,781,000

Significant Items in House and Senate

Appropriation Committees Reports

Item	Action Taken or to be Taken
1990 House Report (Report No. 101-172)	
AIDS	
"The Committee has not approved the AIDS funds transfer authority that was requested in the budget. However, the Committee has included a general provision, section 213, similar to last year's bill which allows the Secretary to transfer AIDS funds between appropriation accounts. The Committee expects the Department to follow the normal reprogramming procedures when making use of this authority. (p. 23)	Since the appropriation language in the final Labor HHS Act bars transfers of HIV funds, to enable the Department to respond rapidly to emerging opportunities, the Department will be unable to seek any reprogramming across appropriations accounts.
Community and Migrant Health Centers	
"The Committee is concerned about the cost to the Federal Government of the lack of coverage for community and migrant health centers and their employees receiving funds under section 329 or 330 of the Public Health Service Act. The Committee encourages the Secretary to explore remedies to the problem. Should legislation be enacted to provide FTCA coverage to such entities and employees, the committee anticipates setting aside sufficient funds within the amounts provided for community and migrant health centers to cover the estimated $4 million annual cost of paying claims against such entities or employees under FTCA. (p. 26)	Protection from malpractice liability is provided by the Federal Tort Claims Act (FTCA) for Federal employees and applies to any physician practicing at a (NHSC site) who is also a Federal employee. Funding for approximately 50% of C/MHCs Medical malpractice costs is provided through grants under Sections 329 and 330. However, current legislation does not provide coverage for non-Federal positions at C/MHCs. The PHS does not believe it is appropriate to legislatively extend such coverage to those physicians (non-Federal employees).
National Health Service Corps	
"The scholarship program provides tuition, fees and stipend support to students to complete their professional education. One year of service obligation in health manpower shortage areas is required for each year of scholarship support. The Committee intends the funds provided	The Health Resources and Services Administration will make scholarship and loan repayment awards to health professionals needed for service in the National Health Service Corps. HRSA will take full advantage of the flexibility provided by the Committee regarding the use of

for scholarships to support the multi-year costs of the scholarships awarded in 1990. The Committee also intends to provide the Department with the flexibility to shift funds between the loan repayment and scholarship programs, depending upon the demand for each. (p. 27)

mechanisms to utilize the funds in the most effective manner. Decisions regarding the distribution of funds by mechanism will be made during the operating year based on an assessment of program needs and opportunities.

"The Committee recognizes the need to continue programs to reduce the shortage of nurses in underserved rural and other areas, as well as facilities. For that reason, the Committee has expanded the use of funds set aside for nurses who agree to serve in the National Health Service Corps to include both loan repayment, as in the 1989 bill, and scholarships. The Corps is directed to promote the availability of the programs, and to consider payment mechanisms that may combine loan repayment and scholarships. The Committee intends that $3 million of the $8 million provided for loan repayment and scholarships be targeted to nurses, and intends that any unused funds from fiscal year 1989 be applied to recruiting other health manpower professionals who are needed in rural areas. (p. 27)

During FY 1990, HRSA plans to use funds for the NHSC Loan Repayment and Scholarship Program to fill some 240 high priority vacancies identified by the NHSC for primary care physicians, the highest priority being those who are certified to perform obstetrical duties including obstetricians, general practitioners and family practitioners. Other high priority primary care physician vacancies include internists, osteopathic general practitioners, pediatricians and other professions needed by the NHSC. Thirty nursing vacancies are identified for graduate nurses (family nurse practitioners and certified nurse midwives) and baccalaureate nurses. Some 5 dental vacancies are also expected to be filled through the program. An allocation by mechanism of support will be made by February 15, 1990.

Rural Health Research

"The Committee recognizes that the nation needs a more coordinated rural health policy and that the Office of Rural Health Policy has not had the resources to expand programs in this area....the Office can establish a new program of agricultural health and safety. The Office would act as coordinator and clearinghouse, and stimulate programs supported by the Department and other agencies, including the USDA Cooperative Extension Service, to improve training, education and surveillance in order to reduce the disproportionate incidence of farmer

The Office of Rural Health has worked with one of its current five rural health research centers to change its program to a principal emphasis upon agricultural health and farm safety. One of its first Federally supported projects will be a catalog of bar manufacturers who can retrofit tractor rolls bars for older tractors still in use; this is important since tractor rollovers are still the single most important fatal agriculture accident, and the availability of roll bars for older tractors is quite limited. In addition, the Office has established and farmworker injuries, disease and fatalities. The Committee also directs the Office of Rural Health Policy to establish and maintain an active liaison with the Health Care Financing Administration in order to better coordinate rural health with Medicare and Medicaid policies. (p. 29)

agricultural health as an important priority for all centers. The Office is increasing its work with the Department of Agriculture on these issues including negotiating the location of its information clearinghouse in the National Agriculture Library's Rural Information Center (RIC). RIC disseminates information regularly through the cooperative extension service. The Office has maintained an active liaison with the Health Care Financing Administration (HCFA) for the past 2 1/2 years. A formal memorandum of agreement outlines responsibilities. Currently one senior staff person is detailed to the Office from HCFA and the detail of a second senior person may be completed soon.

General Dentistry Residencies

"The Committee encourages the Department to establish a new priority for residency programs which increase the recruitment and retention of dentists in rural and underserved areas and make practice in these areas a more attractive career choice. (p. 31)

In FY 1990, the General Dentistry Residency grant program's current funding priority regarding opportunities for training and preparation of dentists for practice in shortage areas has been expanded to include rural health clinics or other facilities and training opportunities in rural areas.

Disadvantaged Assistance

"The Committee is concerned that few minority institutions are among the recipients of the Health Careers Opportunities Program. The Committee encourages the agency to initiate a special effort to work with minority institutions in preparing their Health Careers Opportunities award applications. (p. 32)

In September 1989, four technical assistance meetings were held to assist individuals in the development of their FY 1990 HCOP grant application. A letter was sent to all potential applicants, including all minority institutions, advising them of the meetings which would include individual technical assistance. Minority institutions have also been advised that technical assistance is always available upon request.

Minority health professions schools are very competitive with majority health professions schools for HCOP funds. All health professions schools are notified of technical assistance meetings offered in September of each year and are aware that individual technical assistance is available upon request.

Other Concerns

"...the Secretary is urged to make available, from any available sources, funds to support the efforts of community-based organizations working in partnership with local schools, universities and businesses, to operate programs which assist disadvantaged youths in preparing for, among other things, technical and professional health careers. Partnerships should include in-kind contributions from schools, universities and businesses, and involve health professionals serving as preceptors and counselors. (p. 33)

The Health Professions Reauthorization Act of 1988 specifies that 10 percent of the funds appropriated under Educational Assistance to Individuals from Disadvantaged Backgrounds shall be obligated to community-based programs. Community-based organizations have been encouraged when applying for HCOP grants to include in their proposals linkages with local schools and universities to enhance their preliminary education and facilitating entry initiatives.

Maternal and Child Health (MCH) Block Grant

"The Committee continues to be pleased with the highly successful results achieved through the Hemophilia Treatment Centers Program, ...the Committee was displeased to learn that the agency did not increase funding for the hemophilia treatment centers as specified in both the House and Conference Reports accompanying the fiscal year 1989 bill....the Committee is concerned that, due to limited resources available to the Centers, the program has been able to provide comprehensive services to only half of the hemophilia population, with the rest only having available fragmented services and lacking access to state-of-the-art treatment, as well as risk reduction and counseling support....within the amount available for the MCH setaside, the Committee has provided an $800,000 increase over the budget request for the Hemophilia Treatment Center Program. The Committee fully expects these funds to be utilized as intended. (p. 35)

Fiscal Year 1989 SPRANS funding to the Hemophilia Treatment Centers was increased by $750,000 over the FY 1988 level. The FY 1988 level was $3,896,000 and the FY 1989 level was $4,646,000. The FY 1990 level is estimated at $4,696,000.

The Committee expects the Department to continue to fund genetic screening projects within the MCH setaside, provided that the program is reauthorized by the start of the fiscal year. (p. 35)	Under statutory changes to Title V of the Social Security Act as contained in the 1989 Omnibus Budget Reconciliation Act (PL 101-239), genetic screening projects will be funded under the MCH SPRANS set aside.

Buildings and Facilities

"The Committee provides $889,000 for buildings and facilities for 1990, which is the same as the 1989 appropriation and $889,000 higher than the Administration request....The Committee does not intend that such expenses be supported from the Hansen's Disease Center appropriation. The Committee recognizes that buildings and facilities funding needs may change depending on the conclusions of the Department's report on the long-range mission of the Long Center. (p. 36)	Such expenses will not be supported from the Hansen's Disease Center activity.

Acquired Immune Deficiency Syndrome

"The Committee expects the Department to coordinate the pediatric AIDS demonstrations with the boarder babies projects funded elsewhere in the bill. (p. 37)	The Office of Maternal and Child Health has been and will continue to work closely with the Department's Administration on Children, Youth and Families with respect to "boarder babies" and pediatric AIDS demonstration projects.
Due to significant unmet needs nationwide, the Committee increases funding for facilities renovation grants. (p. 37)	The increase provided will permit some expansion to the number of projects supported.
"AIDS training efforts should include special priority for pediatricians and should also include dentists. Training centers should be operated under existing section 301 authority of the Public Health Service Act, as well as title VII....The Committee encourages the Department to use any available funds to supplement funding for the training centers in 1990. (p. 37)	The FY 1990 Appropriation provides $14.5 million for ETC's which will support 15 projects. During the last two years, the ETCs have trained over 375,000 health care providers throughout the nation.

Health Education Assistance Loan/Student Loan Insurance Fund (HEAL/SLIF)	
"The Committee has been frustrated by the lack of reliable data regarding the Insurance Fund's appropriated needs in 1990. The Committee requests a semi-annual report, with the first report due prior to the start of the fiscal year 1991 budget hearings, on the status of the Insurance Fund and projected appropriations needs under the current law for the next five years." (pp. 37-38)	The Report on the Status of the Insurance Fund and the projected appropriations needs under the current law for the next five years will be submitted to the Committee prior to the FY 1991 budget hearings and each 6 months thereafter.
Vaccine Injury Compensation	
"...The Committee has rejected...the authorizing law to permit the administrative expenses of the Public Health Service and the U.S. Claims Court to be drawn from the Trust Fund. Instead, Public Health Service administrative costs will be supported through the Health Resources and Services Administration program management account. (p. 39)	The FY 1990 Appropriation makes available to PHS $1.5 million from the Vaccine Trust Fund for administrative expenses.
Health Education Assistance Loan/Student Loan Insurance Fund (HEAL/SLIF)	
The Committee...directs that loan guarantee funds under the HEAL program in fiscal year 1990 be available without regard to any apportionments or other administrative limitations not specifically authorized by statute." (p. 81)	The Department is complying with this request.

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Office of Rural Health Policy

"The Committee supported the Secretary of Health and Human Services' decision to create an Office of Rural Health Policy after it was proposed by the Congress. However, the Committee remains concerned that the administration has not developed a coordinated response to the health crisis. In fact, the administration has opposed most rural initiatives proposed by the Congress in recent years. (p. 36)

The President established a Working Group on Rural Development shortly after assuming office. The Working Group is a response to his concern about the rural economy. The Department of Health and Human Services has participated with the Group in developing initiatives on access to health care in rural areas. The Office of Rural Health Policy representatives have played a key role in advocating work group initiatives for health care.

Community Health Centers

"The committee is concerned that applying for funding from the several funding pools provided to community health centers have caused undue administrative hardship to centers and unnecessary administrative costs in the Department. The requirement for multiple applications has placed smaller centers at a competitive disadvantage, due to their leaner administrative structure and diverse patient population. Therefore, the Committee has elected to combine the separate pools of funds for community health centers, thereby reducing overhead costs for centers and for the Department of Health and Human Services. The Committee believes a simplified application procedure will benefit the Community Health Centers Program and the patients served by the program. (p. 53)

In FY 1990, the Community Health Center program application will simplify the supplemental initiatives process by consolidating base funding levels with Retention and Recruitment and Infant Mortality levels in the application.

"It is the Committee's intent that case-managed infant mortality services will become part of each center's operations, and will be funded by the center's grant, without separate funding from an infant mortality initiative. The Committee expects that the highest priority will continue to be placed on the infant mortality initiative and that this administrative simplification

The FY 1990 appropriation action maintained the infant mortality initiative as a separate line item.

will not reduce the focus and resources devoted to this initiative. (p. 53)	
"The Committee is concerned that rural community health center grantees account for 61 percent of all grantees and serve 50 percent of all patients receiving care at community health centers, yet receive only 40 percent of grant funds. The committee is deeply dissatisfied with this funding disparity. Rural community and migrant health centers serve a patient population that is poorer, has a lower health status, and is less likely to have insurance coverage than the urban population. Rural centers are also less likely to receive funds from other sources: Medicare payment rates are lower in rural areas than in urban areas, and just one quarter of the rural and just one quarter of the rural poor qualify for Medicaid, compared to 43 percent of the urban poor. The Committee has noted a recent report of the National Association of Community Health Centers and the National Rural Health Association documenting the decline in the economic standing of rural community health centers in recent years even when funds for Community Health Centers programs have increased. Rural centers are facing rapidly increasing operating expenses due to premiums for malpractice insurance, greater demand for services, and greater expenses associated with sliding fee subsidies for indigent patients. Federal grants have not lowered this shortfall. The Committee requests that the Department keep the Committee informed regularly of its progress in correcting the current inequity in funding between urban and rural community health centers. (pp. 53-54)	The Department has and will keep the Committee informed.
"The Committee continues to be concerned that HRSA has not given sufficient attention to the health care needs of Asian Americans,	The Health Resources and Services Administration (HRSA) will continue to support centers that provide services under Section 330 funding that provide services to substantial

especially those residing on the west coast....the Department is strongly urged to make this population a priority and further, to work closely with recognized Asian American health care organizations and provider groups to ensure that their concerns are appropriately taken into account in establishing this year's funding priorities. The Committee further notes that this issue was addressed in last year's report, and that in its judgment, the Department has not taken this charge seriously enough and in fact, seems to be ignoring the Committee's directive. The Department has the authority to target particular ethnic and/or racial groups that have special and pressing needs. (p. 54)	number of Asian Americans in their communities in San Francisco and West Oakland, CA, New York, NY, Seattle, WA, and in the Pacific Basin areas.
"The Committee is also concerned about efforts to terminate that portion of section 330 funding that is allocated to the Morton Comprehensive Health Services Center of Tulsa, OK, for the operation of a satellite facility, the Indian Health Care Resource Center of Tulsa, Inc. The Indian Health Care Resource Center has been affiliated with the Morton Center since 1980, serving the Indian patient population of 15,000 in the Tulsa area, for whom there are no alternative health care services available.... The Committee urges the Department to recognize the center's compliance, and to continue funding for the Indian Health Care Resource Center so that the center can sustain its critical role in assisting the Morton system to provide health care to the Tulsa community. (pp 54-55)	The HRSA will continue to support the Morton Comprehensive Health Services basic award. The Indian Health Care Resource Center component was phased out for non-compliance with statutory requirements. HRSA recommends that this center seek funding from the Indian Health Service as they exclusively serve an Indian population.
Infant Mortality Initiative	
"The Committee applauds the administration's recognition of the need to provide for increased perinatal capacity for 19,000 patients and to expand the successful case management services to an additional 18,000 high risk, low-income pregnant women through the community and migrant health centers.	In FY 1989, centers were selected that had the greatest impact on infant mortality and were supported commensurate with available funding.

The Committee notes, however, that while 80 percent of the health centers report severe shortages of obstetrical care in their communities, only 33 percent of centers were funded under the infant mortality initiative during 1989. As previously noted, in order to allow a more equitable distribution of funds to all needy health centers, the Committee has combined the $32,000,000 requested for the infant mortality initiative into the basic grant funds provided to health centers. (p. 55)	In FY 1990, all centers will have the opportunity to apply for infant mortality funds, although the final congressional action maintained infant mortality in a separate line item.
NHSC Scholarships	
"The Committee urges the NHSC to provide scholarships to train master's degree level social workers to provide case management and other medical social work services to persons afflicted with AIDS and their families in HIV-endemic areas. The Committee understands that the President's Commission on AIDS recommended that 100 NHSC slots be made available for this purpose. (p. 58)	HRSA will consider this recommendation and the other recommendations of the Commission when making funding decisions. The Commission also recommends a scholarship program enlisting 400 primary care physicians and 200 nurses.
"The Committee again expresses its support for the NHSC increasing its commitment to the Pacific basin region and strongly urges the NHSC to work closely with the new programmatic staff assigned to Honolulu, as directed in Public Law 101-45, the dire emergency supplemental bill, to develop assignments in the newly established Native Hawaiian health centers (Public Law 100-579). (p. 58)	The HRSA remains committed to maintaining its NHSC activities in the Pacific basin areas commensurate with available funding. The NHSC will fully coordinate its activities with appropriate PHS staff assigned to the Pacific basin.
"The Committee again urges NHSC to increase the number of nurses supported under the program, in order that a greater degree of cost-effective and high quality health care can be delivered to rural Americans. (p. 58)	The NHSC Program will consider increasing support for nurse scholarships to the extent funds are available. However, the highest priority is the recruitment of medical students with primary care specialty commitments because of the continuing need to replace scholarship awardees completing their service obligations and the

	persistent heavy demand from the Nation's Health Manpower Shortage Areas for primary care physicians.
Loan Repayment	
"The administration's budget for fiscal year 1990 proposed eliminating funding of the Federal Loan Repayment Program in favor of the State-run effort. The Committee does not concur.... The uneven distribution of health professionals is a national problem. Health manpower shortage areas are not bound by State lines, nor do they exist only in States that have the resources to address this problem. In fact, it is the poorest and most needy States that are least able to assume the administrative costs required to address health manpower shortages. The Committee is also concerned that States without medical schools will be unable to participate in a State loan repayment program, since they cannot recruit recent graduates of programs in other States. "Central management is crucial to ensuring the most efficient use of scarce resources and maximum coordination of placement efforts. Therefore, the Committee directs the Department to maintain the Federal role in recruiting health professionals for the National Health Service Corps by giving priority to the Federal Loan Repayment Program. (p. 58)	The Department will continue to maintain its role in the Federal Loan Repayment program.
"The Committee's top priority for the National Health Service Corps program remains placing health professionals in service in underserved areas. Therefore, in accordance with this program's authorization, the committee expects HRSA to use both the scholarship and loan repayment programs to place health professionals in underserved areas. (p. 58)	The Health Resources and Services Administration will continue to ensure that the NHSC will use both the scholarship and loan repayment programs to place health professionals in underserved areas.
Pediatric emergency care	
"The Committee was pleased to learn of the Department's plans for having the Institute of Medicine develop a	As noted elsewhere in this section, the Division of Nursing, Bureau of Health Professions, with consultation

comprehensive study in the pediatric-EMS area. As indicated elsewhere in the report, the committee expects HRSA to make nursing funds available this fiscal year to be used by certain of the grantees supported under this initiative. HRSA pediatric-EMS staff should also work closely with the CDC staff responsible for the injury prevention initiative. The Committee again expresses its strong interest in having at least one demonstration site address the unique problems of rural America, as well as one primarily addressing mental health issues. (p. 59)	from the Bureau of Maternal and Child Health, has received four grant applications in connection with this activity. Final review is scheduled for May 1990. The staff of the Office of Maternal and Child Health continues to work closely with CDC staff responsible for injury prevention initiatives.

Office of Rural Health Policy

"The Committee is concerned that research must be expanded on farm safety issues and the health problems of rural minorities. The Committee recommends that additional centers be developed addressing these concerns. (pp. 59-60) "... The Committee expects these funds will enable the office to continue supporting the activities of the National Advisory Committee on Rural Health, and to begin operating a clearinghouse for collecting and disseminating information and research finds related to the delivery of health services in rural areas.	One of the current five rural health research centers has now placed its principal emphasis on agricultural health and farm safety as a result of the Committee recommendation. A new center with a principal emphasis on the health problems of rural minorities will be developed during FY 1990. The Office will continue to support the activities of the National Advisory Committee on Rural Health (NACRH). An information clearinghouse on rural health will become operational by October 1990.
"The committee notes that osteopathic medical schools conduct effective rural training programs and place significant numbers of graduates in rural areas.... The committee believes rural health policy would benefit from the use of osteopathic medical training models, and, therefore, recommends that the Secretary allow for the permanent appointment of a representative of osteopathic medical education to the National Advisory Committee on Rural Health as soon as practicable. (p. 60)	The Secretary will consider an appointment of a representative of osteopathic medical training when filling vacancies to the NACRH.

Health Professions

"The Committee expects that the Department will use the increased funds to alleviate shortages of health professionals in underserved areas by establishing a high priority for programs that increase the recruitment and retention of students from rural and underserved areas, and make practice in rural and underserved areas a more attractive career choice. (p. 61)	The Department continues to support programs that increase the supply of health professionals and improve the geographic distribution of health care providers.

Excellence in minority health

"... The Committee was distressed to learn that in fiscal year 1989, the Department limited the pool of eligible recipients to only those schools which the original authorization bill would have covered. Specifically, the University of Hawaii School of Public Health was not allowed to compete, thus significantly limiting the range of minorities supported by the program. The Committee feels that all minorities, including those representing the peoples of the Pacific basin an American Indian tribes, should be deemed eligible under this initiative and further requests HRSA to give significant attention to the importance of geographical balance in allocating this year's funding. (pp. 61-62)	Conference Report 101-274 deleted language proposed by the Senate regarding eligibility for excellence in minority health education grants. This action limits the eligible applicants to only those four schools which the original authorization bill covered.

Preventive medicine residencies

"The Committee strongly urges that these funds be targeted toward primary care preventive medicine programs, emphasizing placement of graduates in primary care settings. (p. 63)	The Preventive Medicine Residencies program provides specialized training which prepares_graduates for roles in primary care education and health services delivery.

General dentistry residency training

"... The Committee directs that HRSA will establish a new priority, beginning in 1990, for programs that increase the recruitment and retention of dentists in rural and underserved areas and make practice	In FY 1990, the General Dentistry Residency grant program's current funding priority regarding opportunities for training and preparation of dentists for practice in shortage areas has been expanded

in these areas a more attractive career choice. In the past, program objectives favored the creation of new programs of residency training over expansion of existing programs. However, in order to address the existing shortage and the projected increase in the shortage of dentists, the Committee suggests the Department give equal weight to expansion of existing programs and creation of new programs, with funds used to expand the number of residency slots in the most cost-efficient manner. (pp. 63-64)	to include rural health clinics or other facilities and training opportunities in rural areas. The funding preferences for new programs and expanding programs were consolidated into a single preference whereby new programs and expanding programs will compete equally for grant support.
Area health education centers [AHEC's] "The Committee recommends $19,000,000 for area health education centers for fiscal year 1990, $2,088,000 more than the appropriation for fiscal year 1989 and $1,100,000 more than the House amount.... The Committee urges HRSA to allocate a portion of the funds provided to special initiative projects, giving special consideration to those in economically depressed areas that are also health manpower shortage areas. (p. 65)	A FY 1990 competitive cycle for the Area Health Education Centers (AHEC) Special Initiatives grants has been conducted. Included in the approved applications are projects which propose to carry out health professions training activities in health manpower shortage areas.
Health professions data analysis "The Committee is keenly interested in the supply and demand of health care professionals in rural areas. To obtain a clearer indication of this situation, the Committee recommends that studies undertaken by HRSA designate results so that the supply of health care providers may be distinguished by rural and urban areas. (p. 66)	The Bureau is developing several models that will project the supply of physicians by metropolitan and non-metropolitan areas. The Bureau has also been working with the American Society of Allied Health Professions on data sets which will permit the determination of allied health manpower serving in rural and urban areas. Similarly, the Bureau is working closely with the profession of pharmacy to improve their data collection ability which will permit determination of pharmacists working in rural and urban areas. Finally, the Bureau is in contact with State governors from which information is being requested relating to manpower problems in rural areas.

Disadvantaged assistance

"The Committee is concerned that many minority health professions schools may not be receiving health careers opportunity awards in proportion to the numbers of minority students they train. The Committee urges the Department to undertake an initiative to ensure that these institutions are competitive in applying for HCOP grants, so that funds may distributed equitably. The Committee encourages support for innovative projects that address the special needs of disadvantaged students, and urges the Secretary to make available additional funds to support the efforts of community-based organizations, working in partnership with local schools, universities, and businesses, to operate programs that assist disadvantaged youths in preparing for technical and professional health careers. Partnerships should include in-kind contributions from schools, universities, and businesses, and involve health professionals serving as preceptors and counselors. (p. 67)

Over the past five years, minority institutions have competed favorably with majority institutions for HCOP funds. Approximately 25 percent of the 170 competitive HCOP applications received in FY 1989 were from minority institutions.

In FY 1989, a total of 28 community-based programs, including four of the five community organizations that applied, were funded at a level of $2.7 million.

Allied health grants and contracts

"The Committee is concerned over the growing shortages of allied health care providers. Specifically, shortages of occupational and physical therapists, speech language pathologists, audiologists, and medical laboratory technologists are severe. According to the bureau of Labor Statistics, the demand for the number of these allied health disciplines will grow by over 50 percent by the end of the 1990's. As part of its rural health initiative, the Committee places a high priority on projects designed to improve the recruitment of individuals from rural and underserved areas into the allied health professions. (p. 67)

The Allied Health Grants and Contracts program applicants are to specifically describe the trainee recruitment and selection process, including the special qualifications which may be stressed to assure that the selected candidates have some interest or background in rural living and in practicing in rural or underserved areas.

Geriatric projects

"... The Committee is very concerned about the future trends in health care for the aged. Between now and the year 2000, the size of the population group aged 55 and older is expected to increase 19 percent; and aged 75 and older will increase by over 50 percent. Therefore, the Committee directs that these funds be used to continue the growth of geriatric education centers to improve the training of physicians and faculty in geriatrics, and to continue health promotion and disease prevention activities. (p. 68)	The FY 1990 appropriation will support approximately 36 Geriatric Education Centers (GEC's). In FY 1989, funds supported 38 GEC's. A wide array of primary care and specialty physicians and medical and other faculty are receiving training and clinical experiences in a variety of health promotion and disease prevention activities related to the aged through GEC's.

Pacific basin initiative

"... It is the Committee's intent that the regional staff will work closely with the Pacific Basin Health Services Council, an entity established by the Governor of the State of Hawaii, in order to ensure that appropriate attention is given to the recommendations of the public health leadership of the Pacific basin in establishing this year's) programmatic priorities. (p. 69)	The HRSA will ensure that the San Francisco regional staff will continue to work closely with the Pacific Basin Health Services Council.

Pacific Basin Medical Officers Training

"The Committee has included $3,000,000 in order to continue the critical Pacific Basin public health initiatives. It is the Committee's intent that $1,660,000 of these funds will be targeted for the medical officers training projects, which is the Committee's top priority...." (p. 69)	An award totaling $1.6 million was made in December of 1989 to the University of Hawaii to fund the continuation of the Medical Officers Training project.

Nurse special projects

"... In establishing this year's programmatic priorities, the Committee recommends that HRSA give serious consideration to projects in the areas of improving access to care in rural America, interdisciplinary	The Bureau of Health Professions, Division of Nursing met with the Bureau of Maternal and Child Health and Resources Development (BMCHRD) to review options for handling the need for nurses employed in emergency

initiatives (including, for example nursing and psychology), recruiting Asian Americans into the nursing profession, and international health care. The Committee feels that each of these areas has tremendous potential for constructive development. The Committee further directs HRSA to set aside funds to be targeted toward the development of nursing expertise in the area of pediatric-emergency medical care. In developing this initiative, the Committee feels that a special effort should be made by HRSA's nursing personnel to work collaboratively with the HRSA pediatric-EMS staff. (p. 71)

rooms to have updated knowledge and skills in care of pediatric emergencies. It was determined, in addition to the EMS pediatric efforts supported by BMCHRD, that a special request for applications for a continuing education offered in pediatric emergency care would be prepared by the Division of Nursing.

The program announcement appeared in the Federal Register July 5, 1989, with a due date of October 1. Four special grant applications have been received in response of the request. They will be reviewed by ad hoc peer reviewers in February of 1990, and receive final review by the Advisory Council on Nurses Education in May 1990. It is anticipated that approved applications will be given special consideration and funding priority.

Nurse anesthetists traineeships

"... The number of nurse anesthesia programs has declined dramatically in recent years, from 194 in 1976 to 80 in 1989. This has reduced by one-half the number of graduates from these programs. With the additional funds provided, the Committee expects that additional programs could open in fiscal year 1990. (pp. 71-72)

In FY 1990, $1,130,000 is appropriated for the nurse Anesthetists Traineeship program. This increase, of $346,000 over 1989 appropriation, will provide an increase of the average amount available to each trainee, to cover tuition and fees. Division of Nursing, Bureau of Health Professions in HRSA worked with the National Center for Nursing Research, NIH in supporting a contract on the availability & supply of nurse anesthetists. The report will be made available to Congress in early 1990.

Maternal and Child Health and Resources Development

"... The Committee encourages States to plan and implement statewide one-stop-shopping strategies for reducing the rate of infant mortality. (p. 73)

HRSA is currently aware of two demonstrations of "one-stop shopping". They are in Virginia, with a demonstration in seven rural counties, and in Alabama, which has a state-wide demonstration.

This has been and continues to be of priority concern. A conference, with public and private representation, on this subject was held in Hawaii in December 1988. A second conference,

"...there has also been a significant increase in reported child abuse within the past year. Accordingly, the committee strongly urges HRSA to make this population a high priority and to develop programmatic initiatives that effectively address their pressing health care needs. The Committee suggests that the Department work closely with the Samoan Service Providers Association, an American Samoan organization in the state of Hawaii, in developing and implementing its plans for reducing these adverse health statistics in a timely fashion. (pp. 73-74)	held in Hawaii, is scheduled for February 1990. The conferences are held in Hawaii, to encourage greater participation by representatives of the Pacific Basin community.
"The Committee is concerned about the growing number of children and youth from low-income families without public or private health insurance. The Committee requests the Office of Maternal and Child Health to explore the potential of establishing a mechanism that would provide consultation and technical assistance to entities interested in facilitating the provision of basic health care to these children through innovative funding mechanisms. (p. 74)	The OMCH is currently supporting two demonstration projects on health insurance for medically underinsured and uninsurable children with special health care needs. These projects are expected to be of significant value in terms of future planning.
"The Committee is supportive of efforts to promote development of regional perinatal care systems to combat infant mortality. In order to determine which medical interventions lead to the best outcomes for patients treated, the Committee believes data must be collected and analyzed comparing interventions and outcomes at community hospitals and the regional hospitals treating patients referred by community hospitals. (p. 74)	The OMCH currently provides support for a national perinatal information system and the data from this network is expected to be useful in the effort to reduce the infant mortality rate both nation-wide as well as regionally. Related to this effort, the OMCH has placed federal perinatal epidemiologist in South Carolina, Alabama, the District of Columbia, and New York under provision of the block grant authorities and in cooperation with CDC.
"The Committee is aware of a perinatal information network.... The Committee believes that data from this network, analyzed appropriately, could render maternal and infant outcomes information that would be useful to better managing the to	

existing perinatal care system in South Carolina and developing other regional perinatal care systems. The Committee hopes the bureau can support this type of effort. (p. 74)	
"The Committee applauds the SPRANS program giving special focus to innovative, comprehensive programs dealing with adolescent pregnancy.... The Committee urges MCH to assist this effort in any appropriate manner. (p. 74)	The OMCH will continue to assist this effort.
"The Committee is impressed with the successful efforts of the Omaha Housing Authority to address the multifaceted needs of its residents, including housing, education, clothing, day care, and health care. The Committee is also aware of the housing authority's proposal to work with the Omaha medical and social services community to provide a comprehensive program of prenatal and perinatal care for residents of Omaha public housing projects.... The Committee urges MCH to support such innovative infant mortality reduction demonstration projects. (p. 74)	The OMCH is aware of the Omaha Housing Authority's proposal. As noted elsewhere in this section, OMCH currently provides grant funding for two similar demonstrations initiatives in Alabama and Virginia.
"The Committee is concerned about continuing funding inequities within the network of university affiliated programs [UAP's].... The Committee is disturbed that many high quality programs of longstanding, and new UAP's created within the last few years, receive less than one-half the Federal financing support of their colleagues, but are charged with meeting the same performance standards. The Committee urges the Bureau to correct the inequitable funding situation within its set-aside for SPRANS. (p. 75)	The OMCH is aware of the Committee's concerns about funding support to the university affiliated programs (UAP). Every effort has been and continues to be made to assure that all of the UAP programs receive an equitable share of the limited funds available in a given fiscal year.
"The Committee notes that Indian children under age 5 have a higher rate of developmental disabilities and handicapping conditions than other children in America.... The Committee urges HRSA acting through the Bureau of Maternal and Child Health and Resources Development, to initiate a model comprehensive home	

and center-based program serving native Americans in fiscal year 1990. (p. 75)	

Community health care services for AIDS

"The Committee notes that local governments in over 30 States are health care providers of last resort, and are critical in shaping a community's response to this disease. The Committee directs that community and migrant health centers' initiatives related to HIV infection reflect collaboration and cooperation with effort by local governments to assure a coordinated community response. (p. 78)	The HRSA requires CHCs funded under the AIDS initiatives establish linkages with local governments and other community based health care providers.
"The Committee notes that, according to the Department's work group on pediatric HIV infection, AIDS can be expected to become one of the five leading causes of death among children and young people in the next few years.... Therefore, of the funds provided, the remaining $9,956,000 shall be used for grants to the network of title X clinics for an urgently needed program of outreach, counseling, and family planning services to high risk women to prevent the spread of AIDS. (p. 78)	The FY 1990 appropriation did not include funding for Title X clinics.

Subacute care

"... The Committee is concerned that people with AIDS requiring the level of services provided by nursing homes have faced continuing problems in obtaining access to such care. Many remain in hospitals when they could receive less intensive and less costly care. These projects will help communities with the highest incidence of AIDS. (pp. 78-79)	Up to three such projects are proposed for FY 1990. The projects will be in geographically diverse areas, will have a research component and will help examine the effectiveness of providing subacute care services for the HIV-infected population.

AIDS education and training centers

"... the committee directs HRSA to carefully review all of the HRSA-funded health care delivery programs to determine how oral health care services can be more effectively provided through existing programs.... (p. 79)

"It is the Committee's intent that HRSA be allowed to use necessary amounts authorized for AIDS to offset support costs required to conduct new and ongoing AIDS activities. (p. 80)

It is recognized that the provision of oral health care for the HIV-infected population is one of many services that individuals with HIV disease need. The Report to Congress on Oral Health Care for AIDS Patients will focus on the existing programs.

The FY 1991 AIDS request includes program support of $4,850,000 and 55 FTEs.

Council on Graduate Medical Education

The Committee recognizes the valuable policy recommendations of the Council on Graduate Medical Education (COGME), and urges HRSA to continue to fund the activities of COGME within available means. (p. 81)

The Health Resources and Services Administration will continue to fund the activities of COGME using the FY 1990 program management funds.

Health Education Assistance Loan/Student Loan Insurance Fund (HEAL/SLIF)

"The Committee requests that the Department of Health and Human Services will report to the Committee on March 1, 1990, on the requirements it has established for lender and school participation in the HEAL program and on the projected solvency of the SLIF account. The Committee understands that the Department is seeking the input of lenders, secondary markets, and health professions schools associations in an effort to develop reasonable requirements for litigation and collection of HEAL loans, and that the Department has developed a forecasting model that should allow more accurate projections of SLIF account balances." (pp. 81-82)

A report on the Department's requirements established for lender and school participation in the HEAL program and on the projected solvency of the SLIF account will be submitted to the Committee by March 1, 1990.

1990 Conference Report (Report No. 101-274)

MCH SPRANS

"The conferees recognize that, due to maternal income, minority status, age and educational attainment levels, the infants of public housing residents are at a greater risk of mortality and morbidity than the general population. The conferees encourage the agency to use SPRANS funds to test the effectiveness of a coordinated, "one-stop shopping" approach to the provision of pre- and post-natal care services to this population, such as that provided in the Omaha project described in the Senate report. (p. 16)

As noted in our response to the Senate report, the OMCH currently provides grant funding for two "one-stop shopping" initiatives in Alabama and Virginia respectively.

Health professions

"The Committee expects that the Department will use the increased funds to alleviate shortages of health professions in underserved areas by establishing a high priority for programs that increase the recruitment and retention of students from rural and underserved areas, and make practice in rural areas a more attractive career choice." (p. 61)

The Department continues to support programs that increase the supply of health professionals and improve the geographic distribution of health care providers.

Pediatric AIDS

"The conferees are aware of private sector interest in the development of model pediatric consortia to provide health and social services, research and training focused on HIV infected individuals and their families and women of child bearing years. The conferees urge the agency to fund up to three such pediatric demonstrations. These demonstrations shall, to the extent possible, provide care for children and their families in the same setting. Such model consortia shall work in collaboration with the National Institute of Child Health and Human Development, the National Institute

Model pediatric consortia, providing comprehensive services to HIV infected individuals and their families, will be one of three categories of projects funded with FY 1990 Pediatric AIDS funds. Awards for these programs will be made in the second half of fiscal year 1990.

of Allergy and Infectious Disease, and the Office of Minority Health. Further, the conferees urge the agency to allocate fiscal year 1990 funds as expeditiously as possible. (pp. 16-17)	

AIDS Drug reimbursement program

"The conferees direct the Secretary to permit the States to make available to eligible individuals therapeutics determined to prolong life or prevent the serious deterioration of health arising from AIDS or HIV infection. The conferees understand that the funding needs for the program may be greater than anticipated in this bill. Therefore, the conferees are agreed that this program will be carefully monitored with the recognition that a supplemental appropriation may be necessary to adequately fund it. (p. 17)	States were advised of the availability of these funds and initial grant accounts. Awards have been given to all states indicating a need for these funds.
"The conferees remain concerned about the price of AZT. Even with the recent price reduction by the manufacturer of the drug, AZT remains prohibitively expensive for most AIDS patients. While the conferees are providing additional funds for the AIDS drug reimbursement program, the conferees strongly urge the manufacturer of AZT to take further steps to make the drug more affordable and more widely accessible to low-income patients. (p. 17)	The Department agrees with the concern expressed by the conferees and has urged States to consider the use of sliding income scale to determine a low-income eligibility. Such an approach should make the funds available to a larger number of individuals.

Secretary's Commission on Nursing

"The Conferees commend the efforts of the Secretary's Commission on Nursing, as established under Public Law 92-463, to address the nursing shortage in this country. Funds have been provided to fund a Commission for a period of one year, ending September 30, 1990. The conferees also encourage the Secretary to appoint a nurse as an Assistant to the Secretary to assist in the implementation of the Commission's	A charter for a new Commission on the National Nursing Shortage has been developed and submitted to the OS. Also, a recommendation has been submitted to the Secretary that the Chief, Nurse Officer, PHS, be designated as the person responsible for carrying out this function.

recommendations, and to serve as an advisor to the Secretary on health care policy matters which affect nursing." (p.22)

Authorizing Legislation

	1990 Amount Authorized	1990 Estimate	1991 Amount Authorized	1991 Budget Request
1. Health Care Delivery and Assistance				
A. Community Health Centers (PHS Act, Section 330)	Such Sums as Necessary	127,309,000	Such Sums as Necessary	138,309,000
B. Black Lung Clinics (Federal Mine & Safety Act of 1977 (Sec 427(a))	10,000,000	3,651,000	10,000,000	3,651,000
C. Migrant Health (PHS Act, Sec 329)	Such Sums as Necessary	47,369,000	Such Sums as Necessary	48,369,000
D. Infant Mort. (PHS Act, Sec 329-330)	32,000,000	31,579,000	37,500,000	35,708,000
E. Home Health Service Demonstration (PHS Act, Sec 395-397)	5,000,000	2,961,000	Expired	---
F. National Health Service Corps (PHS Act, Sec. 331-338)	65,000,000	41,837,000	Proposed	42,361,000
G. National Health Service Corps Recruitment (PHS Act, Sec 338A-G)	Such Sums as Necessary	8,882,000	Such Sums as Necessary and Proposed	63,882,000
H. Hansen's Disease Center (PHS Act, Sec 320, and Title XVVI)	Indefinite	18,158,000	Indefinite	22,601,000
I. Payment to Hawaii (PHS Act, Sec 320)	Indefinite	3,217,000	Indefinite	3,217,000
J. Pacific Basin Initiative (PHS Act, Sec 301)	Indefinite	336,000	Indefinite	---
K. Health Care for the Homeless (PHS Act, Sec 340)	63,600,000	33,667,000	66,200,000	45,552,000
L. Native Hawaiian Health Care (PHS Act, Sec 338J and P.L. 100-579, Sec 3-5)	4,400,000	1,283,000	7,800,000	1,283,000
M. Nursing Loan Repayment (PHS Act, Sec 836(h) and Sec 837A)	5,000,000	982,000	5,000,000	---
N. Health Services in Underserved Neighborhoods (PHS Act, Title III)	---	---	Proposed	35,000,000

Authorizing Legislation (Continued)

2. Health Professions	1990 Amount Authorized	1990 Estimate	1991 Amount Authorized	1991 Budget Request
A. Health Professions				
(1) Health Professions Student Assistance Exceptional Financial Need Scholarships (PHS Act, Sec. 758)	30,000,000	6,685,000	30,000,000	10,000,000
(2) Health Professions Institutional Assistance Excellence in Minority Health (PHS Act, Sec 782)	Such Sums as Necessary	9,231,000	Such Sums as Necessary	12,000,000
(3) Health Professions Institutional Devel./ Faculty (PHS Act, Title VII)	---	---	Proposed	12,000,000
(4) Health Promotion/Disease Prevention				
Public Health Cap. (PHS Act, Sec 770)	3,000,000	2,918,000	Repealed	---
Public Health Special Proj. (PHS Act, Sec 790A)	3,500,000	834,000	5,000,000	---
Health Admin. Grants (PHS Act, Sec 791)	1,600,000	1,483,000	1,700,000	---
Public Hlth Traineeships (PHS Act, Sec 792)	4,200,000	2,987,000	4,300,000	---
Hlth Admin. Traineeships (PHS Act, Sec 791A)	500,000	492,000	500,000	---
Preventive Med. Resid. (PHS Act, Sec 788(c)and (f)(2)(A))	2,500,000	1,695,000	4,000,000	---
Allied Health Projects (PHS Act, Sec 796)	2,000,000	737,000	2,000,000	---
(5) Primary Care:				
Family Med/General Dent. Resid & Training (PHS Act, Sec 785 and 786)	46,000,000	36,689,000	48,000,000	---
General Medicine & Ped. (PHS Act, Sec 784)	23,000,000	17,683,000	25,000,000	---
Family Medicine Departs (PHS Act, Sec 780)	7,000,000	6,680,000	7,000,000	---
Physician Assistants (PHS Act, Sec 788(d) and (f)(2)(B))	5,200,000	4,789,000	5,400,000	---
(6) Geriatric Training and Research (PHS Act, Sec 789(a)-(c) and Sec 301)	20,000,000	14,017,000	26,000,000	---
(7) Health Prof. Special Educ. Initiatives (PHS Act, Sec 301 and 788 (a/b/e/f))	4,000,000	2,457,000	4,000,000	---
(8) Area Health Education Centers (PHS Act, Sec. 781(a-e) and (h)(1))	20,000,000	18,125,000	20,000,000	---
(9) Border Health (PHS Act, Sec 781(f)and (h))	8,000,000	3,929,000	12,000,000	---
(10) Disadvantaged Ass't. (PHS Act, Sec. 787)	34,000,000	26,965,000	36,000,000	31,578,000
(11) Community Based Recruitment and Support (PHS Act, Title III)	---	---	Proposed	5,000,000

Authorizing Legislation (Continued)

	1990 Amount Authorized	1990 Estimate	1991 Amount Authorized	1991 Budget Request
(12) Health Prof. Analytical Studies and Reports (PHS Act, Sec 301, 332, 708 and 799)	Indefinite	1,846,000	Indefinite	---
(13) Pacific Basin - Med Officer Training (PHS Act, Sec 301)	Indefinite	1,638,000	Indefinite	---
(14) National Practitioner Data Bank (P.L. 99-660, Title IV and PL 100-93, Sec 5)	Indefinite	1,974,000	Indefinite	---
(15) AD HOC Hospital Grants (P.L. 100-607, Sec 638, 704-705)	1,360,000	1,313,000	1,360,000	---
(16) Interdisciplinary Traineeshps (PHS Act, Sec 799(A)(a-d) and (f-h(1)))	5,000,000	2,210,000	5,000,000	---
B. Nurse Education:				
(1) Advanced Nurse Educ. (PHS Act, Sec 821)	13,000,000	12,771,000	20,000,000	---
(2) Nurse Pract./Midwife (PHS Act, Sec 822)	17,000,000	13,432,000	21,000,000	---
(3) Nurse Special/Demonstration Projects (PHS Act, Sec 820)	16,000,000	10,283,000	20,000,000	---
(4) Prof Nurse Trainee.(PHS Act, Sec 830)	15,000,000	13,501,000	16,000,000	---
(5) Nurse Anesthetists (PHS Act, Sec 831)	1,800,000	1,130,000	1,800,000	---
(6) Nursing Scholarships (PHS Act, Sec 843)	30,000,000	2,948,000	30,000,000	---
(7) Nurse Education Opportunities (PHS Act, Sec 827)	1,000,000	2,571,000	5,000,000	4,000,000
Less transfer from HPSL and NSL revolving fund		-10,000,000		
3. Maternal and Child Health and Health Resources Development				
A. MCH Block Grant (Title V, Social Security Act) and proposed legislation	686,000,000	553,627,000	686,000,000	578,627,000
B. EMS for Children (PHS Act, Sec 1910)	1,000,000	3,947,000	5,000,000	---
C. Health Teaching Fac.(PHS Act, Sec 726)	Indefinite	488,000	Indefinite	488,000
D. Organ Transplantation (PHS Act, Sec. 301 and Sec 371-376)	6,600,000	3,918,000	Indefinite	3,257,000

Authorizing Legislation (Continued)

	1990 Amount Authorized	1990 Estimate	1991 Amount Authorized	1991 Budget Request
4. Building and Facilities (PHS Act, Sec 321(a))	Indefinite	877,000	Indefinite	---
5. Program Management (PHS Act, Sec 301)	Indefinite	93,384,000	Indefinite	94,765,000
6. Rural Health (SSA Act, Sec 711 and PHS Act, Sec 301)	Indefinite	3,380,000	Indefinite	1.380,000
7. AIDS				
A. AIDS Training (PHS Act, Section 788A(a)-(e) and Sec 301	Such Sums as Necessary	11,519,000	Such Sums as Necessary	21,000,000
B. Community Hlth Care Svc. (PHS Act, Sec 301)	Indefinite	10,777,000	Indefinite	13,323,000
C. HIV Hlth Service Grants (PHS Act, Sec 301)	Indefinite	17,209,000	Indefinite	19,424,000
D. HIV Low Prevalence (PHS Act, Sec 301)	Indefinite	---	Indefinite	---
E. Pediatric AIDS Demos (PHS Act, Sec 301)	Indefinite	11,803,000	Indefinite	11,803,000
F. Formula Grants to States (PHS Act, Sec 2401-15)	100,000,000	19,737,000	Repealed	---
G. AIDS Drug Reimbursement (FY 1990 Approp. Lang.)	---	29,606,000	---	---
H. AIDS Facilities Renovation (PHS Act, Sec 1610(b)	Indefinite	1,342,000	Indefinite	4,129,000
I. Subacute Care (PHS Act, Sec 2421)	Such Sums as Necessary	1,180,000	Such Sums as Necessary	---
Total Appropriation		1,607,488,000		1,568,707,000
Total Appropriation against definite authorization		902,685,000		710,399,000

Health Resources and Services

Table of Estimates and Appropriations

	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation 1/
1982	456,272,000 2/	1,329,373,000	1,542,017,000	1,474,651,000
1983	1,083,313,000	1,414,159,000	1,460,442,000	1,509,615,000
1984	279,944,000 2/	1,252,783,000	1,363,399,000	1,380,151,000
1985	245,419,000 2/	3/	1,455,289,000	1,505,222,000
1985 Supplemental	---	---	4,920,000	4,500,000
1986	1,157,393,000	564,853,000 4/	1,408,979,000 4/	1,497,934,000
1986 Sequester				-49,713,000
1986 Supplemental	---	---	2,000,000	2,000,000
1987	1,162,670,000	1,267,068,000	1,499,753,000	1,470,763,000
1987 Proposed Rescission	-161,210,000	---	---	---
1987 Supplemental	---	104,625,000	48,750,000	64,750,000
1988	1,106,977,000	1,365,476,000	1,665,513,000	1,556,265,000
1989	1,225,257,000	769,554,000 4/	1,642,685,000 4/	1,632,584,000
1989 Supplemental	---	---	800,000	800,000
1990	1,351,643,000	1,553,465,000	1,820,245,000	1,770,386,000
1990 Sequester				-23,262,000
1991	1,556,822,000			

1/ Reflects enacted supplementals and reappropriations.

2/ Excludes funds for those block grants which were proposed for transfer to OASH.

3/ The House did not consider funding for Health Resources and Services because a large portion of funds requested were not authorized.

4/ The House and Senate deferred action on funding consideration for some programs within the Health Resources and Services account because of lack of authorization.

JUSTIFICATION

HEALTH RESOURCES AND SERVICES ADMINISTRATION

Health Resources and Services

	FY 1990 Revised Estimate		FY 1991		Increase or Decrease	
	FTE	Amount	FTE	Amount	FTE	Amount
Health Resources and Services:						
1. Health Care Delivery and Assistance	300	$621,231,000	200	$739,933,000	-100	+$118,702,000
2. Health Professions	---	211,103,000	---	74,578,000	---	-139,525,000
3. Maternal and Child Health and Resources Development	---	562,010,000	---	582,372,000	---	+20,362,000
4. AIDS	---	112,503,000	---	72,679,000	---	-39,824,000
5. Building and Facilities	---	877,000	---	---	---	-877,000
6. Program Management	1,433	93,381,000	1,328	94,765,000	-105	+1,381,000
7. Rural Health	---	3,380,000	---	1,380,000	---	+1,000,000
TOTAL	1,733	$1,607,488,000	1,528	$1,568,707,000	-205	-$38,781,000

GENERAL STATEMENT

The Health Resources and Services Administration (HRSA) supports grants and direct services designed to provide health services for special populations and designated beneficiaries; improve the education, supply and distribution of health professionals; and provide technical assistance regarding the utilization of health resources and facilities. HRSA thus fills gaps in health services financing for special groups and provides incentives to assure sufficient health care opportunities for targeted populations such as mothers, infants and HIV-infected individuals.

In pursuing these goals, HRSA works closely with the States, recognizing that, while States have a fundamental responsibility for providing primary health care, the Federal government can provide leadership and assistance. Over half of the States have signed agreements to work with the Federal government to determine how best to distribute federal resources to their medically underserved populations.

HRSA is currently pursuing a number of new and recent initiatives, all of which will continue to be high priorities during FY 1991:

- o Minority Health Initiative -- HRSA will implement a new initiative encompassing programs designed to increase the number of minority health professions students and graduates and expand the service of minority health practitioners to minority and disadvantaged populations.

  This initiative consists of:

  * Extension of the NHSC Loan Repayment and Scholarship programs;
  * Establishment of health service in underserved neighborhoods;
  * Creation of a new faculty improvement program for minority health professions schools; and
  * Implementation of a new community based recruitment and support activity focused on minorities and the disadvantaged.

- o Maternal and Child Health -- Ongoing efforts through formula and project grants to help State and community based organizations enhance access to pre-natal and post-natal care, particularly in areas with above-average infant mortality rates or minority health disparities.

- AIDS -- HRSA has taken the lead in demonstrating innovative approaches for working with those affected by AIDS, including models for adult and pediatric health care services; the provision of care through community and home health services. The agency is also educating health providers about the many AIDS issues that confront them.

- Homeless Health Grants -- HRSA began awarding grants to community organizations and localities to help them meet the health needs of their homeless populations during FY 1987.

- Rural Health -- In order to ensure that rural health issues continue to be closely examined, HRSA created an Office of Rural Health Policy and is seeking expanded funding in FY 1991.

- Gillis W. Long National Hansen's Disease Center -- Funds are requested to implement the strategic plan for the Carville, Louisiana facility which would contract for patient care and move the internationally regarded research activities to modern accommodations in an academic setting.

- Infant Mortality Prevention Initiative -- HRSA supports a substantial prenatal and perinatal care program emphasizing the case management approach to health care.

- Vaccine Improvement Program -- HRSA has implemented its delegated responsibility for providing medical review of petitions for compensation under the National Childhood Vaccine Injury Act of 1986 and for paying claims from the Vaccine Improvement Program Trust Fund.

- Quality of Care -- In FY 1990, HRSA plans to operate a national practitioner data bank involving the medical, dental and other health care practitioners malpractice settlements and judgments and professional disciplinary actions related to licensure, clinical privileges and professional society membership for physicians and dentists. The FY 1991 budget proposes to collect the full cost of operating through user fees.

The President's budget requests a total of $1,553,822,000 for HRSA activities during FY 1991. This level of funding will enable HRSA to continue to provide support for its various categorical and block grant programs, and to pursue the high-priority initiatives listed above.

Program Accomplishments

Bureau of Health Care Delivery and Assistance

The programs of the Bureau of Health Care Delivery and Assistance provide for the delivery of primary and preventive health care services to medically underserved populations and disadvantaged minorities including mothers and infants, migrant and seasonal farmworkers, victims of Hansen's disease, homeless individuals, substance abusers, HIV infected persons, and the elderly; and for health promotion and occupational health services to Federal employees.

Community Health Centers

The Community Health Centers program makes grants to non-profit entities which in turn provide primary and preventive health care services to medically underserved populations. Access to health services will be given to an estimated population of 5,350,000 through 550 grants in FY 1990. These centers will provide case-managed primary care services, alcohol and substance abuse services, and health services directed to medically indigent and low income individuals, homeless persons and AIDS victims.

Infant Mortality Initiative

The Infant Mortality Initiative program is directed toward reducing the nation's infant mortality rate by supporting the expansion of perinatal systems in existing Community and Migrant Health Centers. Perinatal systems are designed to improve the outcomes of pregnancies by reducing the incidence of low birth weight and using case management approaches to expand primary and supplemental health services, and improve access to needed services for pregnant women and children. In FY 1990, case management services will be provided to 70,000 mother/infant pairs. The total perinatal capacity at community and migrant health centers will be 175,000 mother/infant pairs.

Black Lung

The Black Lung Clinics program funds project grants or contracts to public and private entities for the operation of clinics which treat respiratory and pulmonary impairments in coal miners and former coal miners. In FY 1990, the program is providing access to health care services to 32,000 victims of black lung disease at 38 delivery sites.

Migrant Health Centers

The Migrant Health Centers program provides primary health services to migrant and seasonal farmworkers and their families through grants to non-profit entities. In FY 1990, 500,000 migrant and seasonal farmworkers are being served by 122 Migrant Health grantees.

Health Care for the Homeless Program

The Health Care for the Homeless Program, through project grants to local public and private non-profit entities, provides for the delivery of primary health care services, alcohol and substance abuse services and mental health services to the homeless populations of the United States. In 1990 an estimated 346,500 homeless will be served by 92 grantees.

National Health Service Corps (NHSC)

The NHSC program has in place 1,751 health professionals in health manpower shortage areas in 1990 in order to provide services to areas that cannot otherwise recruit or retain health practitioners.

National Health Service Corps Recruitment Programs

The NHSC Recruitment Programs incorporate NHSC Scholarships and NHSC Loan Repayment programs in order to assure an adequate supply of trained health care providers for the NHSC, to attract health professionals to targeted underserved areas, and to provide support for financially disadvantaged and minority health students who will then serve in disadvantaged areas. The program goal is to place practitioners as quickly as possible in underserved areas by any or all of the following mechanisms: the NHSC Loan Repayment programs (Federal and State); NHSC Scholarships; and the Loan Repayment and Scholarship Programs for Disadvantaged and Minority Students.

Hansen's Disease Program

In FY 1990, the Hansen's Disease Program will provide health care and rehabilitative services to victims of Hansen's disease throughout the Nation. The Gillis W. Long Hansen's Disease Center will experience about 55 new admissions, 110 readmissions, and 3,436 outpatient visits during the year, while the regional contract patient care activity will provide care for about 3,900 participants.

Federal Occupational Health

The Federal Occupational Health program operates occupational health programs, including employee assistance services, for Federal agencies on a reimbursable basis. In addition, the program develops standards for and evaluates Federal occupational health programs, and advises federal managers in implementing and operating their occupational health operations. In FY 1990, Federal Occupational Health activities and concerns will impact on the employees of 98% of the major Federal agencies.

Bureau of Health Professions

The programs of the Bureau of Health Professions continue to support efforts to assure equity in access of health service and health careers for the minority/disadvantaged by increasing the number of minority and disadvantaged students who become health or allied health professionals. In FY 1990, the Bureau will focus on: health care quality assurance issues; increasing the supply of primary care practitioners; supporting programs that improve geographic distribution of health professionals; ensuring the availability of adequately prepared health professionals in the areas of disease prevention and health promotion, care of the elderly, infant mortality, substance abuse and HIV/AIDS. The Bureau will also support programs which offer education in public health and health administration.

Minority/Disadvantaged Assistance

The Excellence in Minority Health and the Health Careers Opportunity (HCOP) programs serve as the Federal focus for advancing excellence in selected predominantly minority health professions educational institutions and toward increasing the number of minority/disadvantaged individuals in the health and allied health professions.

The Excellence in Minority Health program, in FY 1989 and FY 1990, focused on four health professions schools that had received support through the Advanced Financial Distress program. These schools have graduated approximately 45 percent of the Nation's black physicians and dentists, 85 percent of the black veterinarians, and 30 percent of the black pharmacists.

Over 13,000 students in various phases of their career planning and preparation benefit each year from HCOP structured programs. It is further estimated that 24,000 students benefit from unstructured (predominately recruitment) activities each year. The ethnic representation of HCOP participants approximates 76 percent African Americans, 16 percent Hispanics, 3 percent Native Americans, 3 percent Asian Americans or Pacific Islanders and 2 percent disadvantaged whites.

National Practitioner Data Bank

In FY 1990, the bureau will oversee the establishment and operation of a National Practitioner Data Bank. Coverage of the data bank includes physicians and dentists and all licensed health care practitioners and health care entities. The data bank relies on the collection of user fees to cover the costs of processing requests for information.

Student Assistance Programs

In FY 1990, Exceptional Financial Need Scholarships totaling $6,700,000 will be made to approximately 2,200 health professions students.

The Health Education Assistance Loan (HEAL) program has guaranteed approximately $2.1 billion in loans to nearly 100,000 individual borrowers through FY 1990.

The Health Professions and Nursing Student Loan provisions of the Public Health Service Act authorize redistribution of returned loan funds to participating health professions and nursing schools to make awards to eligible students who meet specified criteria for need of financial assistance. In FY 1990, approximately $62,000,000 will be awarded by health professions schools to support over 20,000 students. Approximately $16,000,000 will be awarded by nursing schools to support about 8,000 students.

In FY 1990, $5,400,000 for the Financial Assistance for Disadvantaged Health Professions Students program will provide support to an estimated 2,100 students of exceptional financial need who are enrolled in schools of medicine, osteopathic medicine and dentistry.

The Scholarship for Undergraduate Education of Professional Nurses grant program will provide scholarships to individuals who demonstrate financial need in return for service as nurses in designated shortage areas. In FY 1990, as estimated 750 individuals will receive scholarships totaling $3,000,000.

AIDS Information/Education

Grants were made during FY 1990 to support the development of 15 AIDS Regional Education and Training Centers (ETC) designed to provide training in the care of people with AIDS and other HIV related conditions to a broad spectrum of primary health care providers. During the past two years, the ETCs have trained over 375,000 health care providers throughout the nation.

Vaccine Improvement Program

The bureau is charged with the internal and external medical review of claims by outside consultants, including expert testimony to the court when warranted, professional and administrative support to the Advisory Commission on Childhood Vaccines, meeting specific administrative requirements of the Act, maintaining necessary records and reporting, as required, to Congress. As of December 29, 1989, 203 petitions had been filed with the U.S. Claims Court and $10,500,000 has been awarded in 26 Court decisions.

Bureau of Maternal and Child Health and Resources Development

The programs of the Bureau of Maternal and Child Health and Resources Development include demonstration, training and other programs to combat the current epidemic of Acquired Immune Deficiency Syndrome (AIDS); preventive health services and other specialized care to mothers and children; encouragement of organ transplantation activities; and monitoring of the Federal investment in health care facilities.

Maternal and Child Health (MCH) Block Grant

The MCH Block Grant allows each State to develop its own programs and set its own priorities in providing preventive, primary and specialized health services to mothers and children. A total of $470,582,950 is available for Block Grants in FY 1990. All 50 States, Puerto Rico, the District of Columbia, the Virgin Islands, and the insular areas of the western Pacific are awarded grants, and efforts continue to provide professional and technical assistance and program consultation. Through the block grant, Office of Maternal and Child Health (OMCH) and the Center for Disease Control have co-funded the placement of MCH personnel in the State Health Departments of four states(AL, DC, NY, SC) with high Infant mortality rates to assist state health officials in identifying trends, causes, and improvements in the infant mortality rates.

In FY 1990, a total of $83,044,050 will be available for an estimated 445 grants under the Special Projects of Regional and National Significance (SPRANS) set-aside authority. Of the projects funded, 131 are training projects which provide single and multiple discipline MCH long-term and short-term training to health professionals. For services research, 41 projects addressing problems of the provisions of services to mothers, their children and children with special health care needs. A total of 51 genetic projects and 25 hemophilia projects, which provide services on a regionalized basis, and 197 demonstration projects targeted on innovative health care models for services to mothers and children were funded throughout the country.

Under the SPRANS set-aside, the OMCH has led a PHS one-stop shopping pilot effort at two sites--in a CHC and at a State Department of Health--in addition to an evaluation of current one-stop shopping models.

Through a cooperative initiative with the Alcohol Drug Abuse and Mental Health Administration, OMCH has jointly sponsored projects offering comprehensive services for substance-abusing pregnant women and their infants.

A Healthy Futures/Healthy Generations collaborative effort with the Robert Wood Johnson Foundation continues to assist States faced with extensive infant mortality problems to increase and improve access to maternal and infant care. SPRANS grants were made to five States and one insular area under this public/private partnership, which represents a total investment of more than public/private partnership, which represents a total investment of more than $10 million in the future of many of the Nation's children.

A 5-year initiative, under SPRANS training programs, is underway to enhance the analytic skills of MCH professionals in schools of public health.

Along with the Health Care Financing Administration (HCFA), OMCH is sponsoring a project with the American College of Obstetrics and Gynecology to increase the number of providers in publicly sponsored perinatal programs such as MCH and Medicaid. This builds upon recent HCFA and HRSA efforts to ensure that Medicaid programs address infant mortality issues to a greater extent.

Health Facilities

Activities to recover grants funds awarded under Titles VI, VII, VIII and XVI when a facility no longer meets the original grant criteria continue in FY 1990 (approximately $3.1 million was recovered in FY 1989 following over 140 recovery reviews). Alternatively, when facilities funded under Title VI/XVI are sold to an ineligible entity, the new owner may establish an irrevocable trust fund to provide uncompensated care. Several such trusts are anticipated in FY 1990. Two trusts totalling $4.7 million were established in 1989.

The financial and operational condition of approximately 255 direct and guaranteed Hill-Burton loan recipients with over $755 million in outstanding principal was closely monitored. The early identification of problems permits the provision of technical assistance to facilities to help them properly amortize their loans and reduce potential for default.

Staff continued to monitor the obligation to provide an estimated $376.7 million in uncompensated care to persons unable to pay by 3,028 health facilities (at this writing) which received Federal Hill-Burton grant and loan funds. Under new rules, governing compliance, 822 facilities of 2,466 will be audited for compliance. Facilities who had a compliance deficit in their previous fiscal year must submit a report for analysis. Approximately 500 such reports are expected during FY 1990.

Under the authority of Section 1610(b) of the PHS Act, a total of $4.3 million is available in FY 1990 for the construction and renovation of non-acute care intermediate and long-term care facilities for patients with AIDS.

Organ Transplantation

Through contracts, support is being provided to the National Organ Procurement and Transplant Network and the Scientific Registry of Transplant Recipients. Funding will also be available in FY 1990 to organ procurement organizations to help improve the efficiency with which organs are procured for transplantation and to help educate health professionals about the process for requesting organ donation. Also, grants and contracts are to be awarded to enhance public awareness about organ donation.

Pediatric AIDS Demonstration Projects

Approximately 25 pediatric AIDS health care demonstration grants will be awarded in FY 1990. These grants demonstrate strategies and models for pediatric AIDS prevention, education and information dissemination efforts and coordination of services for children and women of child-bearing age who have or are at risk for HIV infection, AIDS or AIDS related conditions.

AIDS Service Demonstration Projects

Grants to support service demonstration projects (SDPs) have been awarded to 25 metropolitan areas in 15 States, the District of Columbia, and Puerto Rico which have the highest cumulative prevalence of AIDS cases. These SDPs are to support the organization of systems of care for people with HIV-related conditions which will:

- Identify service needs and take measures to meet those needs;
- Provide optimal integration of community resources through effective coordination; and
- Ensure a continuity of services through effective case management.

The demonstration projects are coordinated with the Robert Wood Johnson Foundation's AIDS demonstration projects in the same geographic areas.

In FY 90, the Office of Special Projects (OSP) and the National Institute of Drug Abuse (NIDA) initiated an outreach and case management demonstration model for intravenous drug users (IVDU) through the AIDS Service Demonstration Program and the NIDA outreach program. One supplemental grant was awarded to the Miami SDP to support this initiative. Evaluation of this and any future projects will measure whether case management/outreach improves IVDU access to a range of services and contributes to behavior change which will decrease HIV transmission.

HIV Services Planning Program

In September 1989, OSP awarded $3.45 million in grants to 22 States and areas with low HIV prevalence in a new program designed to support planning for the care of increasing numbers of HIV patients. Grantees will assess needs and project required services, develop a plan for resource development and coordination, establish a coalition of HIV service providers, develop a plan for financing the coalition and the program, and submit such plans to OSP for distribution to other communities as possible models. Ten grantees will be developing state-level plans, while 12 will work on regional plans for individual standard metropolitan statistical areas.

AIDS Drug Reimbursement Program

In FY 90, OSP continued the distribution of funds through formula grants to States to pay for drugs determined to prolong the life or prevent serious deterioration of health of people with AIDS or HIV infection. States use these funds to cover the cost of drugs for low-income HIV and AIDS patients whose drugs are not covered by third-party insurers. Each State's allotment is determined on the basis of its proportional number of AIDS cases as reported to the Centers for Disease Control. In FY 1990, approximately $29.6 million was appropriated for this program.

Home and Community Based Health Care for HIV patients

In FY 90, OSP will initiate a new program to support payment for home based care for low income medically and chronically disabled HIV patients. Authorized by P.L. 100-607, the program will operate through formula grants to States which are required to agree to a number of conditions set forth in the law. These conditions include public hearings conducted in the State, outreach to eligible populations, and provision of care under written plans prepared by health professionals. Grants totalling over $18 million will have been made by the end of fiscal year 1990.

Sub-acute Care Demonstrations

P.L. 100-607 authorized support for sub-acute care demonstrations during FY90. OSP will initiate the program in compliance with requirements of the law which stipulated that the demonstrations are to determine the effectiveness and cost of providing subacute care services to HIV infected patients, and the impact of such services on the health status of the patients. Subacute care means medical and health care services required for persons recovering from acute care episodes that are less intensive than care provided in acute care hospitals. Skilled nursing care, hospice care, and other types of health services provided in other long-term-care facilities are included in the definition. Demonstrations are to be conducted during a 4-year period in geographically diverse sites with the highest incidence of AIDS cases and the greatest need for subacute-care services.

MANAGEMENT SAVINGS

HRSA's resource level reflects the success of ongoing efforts to achieve management efficiencies. HRSA will continue to explore more efficient ways to meet program mandates. Over the eight years of HRSA operations, the agency has had management savings of 608 FTEs. However, management efficiency and productivity is not expressed solely in terms of FTE eliminations. Of considerable significance is HRSA's ability to utilize its human resources through effective management without implementing a reduction in force in the face of major program cuts, transfers and realignments. This is important because it saves the Agency termination costs, extra personnel management effort and employee disruption that a RIF entails.

Improved productivity in HRSA in FY 1991 will be found in effective implementation of programs and the quality of services provided to clients. A significant management savings of 100 FTEs during FY 1991 is proposed in the Strategic Plan developed for the Gillis W. Long National Hansen's Disease Center. HRSA will continue to review Agency management and program activities for additional opportunities to reduce FTEs in FY 1991 where a reduction is feasible.

Fiscal Year	Management Savings	Program Savings	FTE Usage
1983	-79	-566	4,737
1984	-157	-571	4,009
1985	-63	-534	3,412
1986	-198	-157	3,057
1987	-40	-631	2,386
1988	-64	-72	2,250
1989	-6	-40	2,204
1990	-1	-42	2,161
1991	-100	-105	1,956

During FY 1990, HRSA will begin to develop a 5 year Total Quality Management Initiative work plan. Funds for the implementation of this initiative are not being requested at this time in the FY 1991 proposals.

- Minority Health Initiative

Authorizing Legislation -- Titles III and VII of the PHS Act, plus pending legislation.

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority (non-add):	---	$107,000,000	+$107,000,000
NHSC Loan Repayment/ Scholarships	---	55,000,000	+55,000,000
Health Services in Underserved Neighborhoods	---	35,000,000	+35,000,000
Health Professions Institutional Assistance - Faculty Development	---	12,000,000	+12,000,000
Community Based Recruitment & Support	---	5,000,000	+5,000,000

Purpose and Method of Operation

Minority/disadvantaged students continue to be underrepresented in the health professions. Despite the unprecedented explosion in scientific knowledge and the growing capacity of medical science to diagnose, treat, cure and prevent disease, most of our minority citizens have not benefitted fully or equitably from these improvements or from those systems providing essential health care services. The Department is committed to reducing the health disparities between minority populations and non-minority populations as outlined in the 1986 Report of the Secretary's Task Force on Black and Minority Health. The programs of the Minority Health Initiative are designed to increase the number of minority health professionals and to increase the number of practitioners serving minority or disadvantaged populations. The initiative extends ongoing programs and proposes new activities to achieve these goals.

LOAN REPAYMENTS AND SCHOLARSHIPS FOR DISADVANTAGED HEALTH PROFESSIONS STUDENTS

This new program supports loan repayments and special scholarships to financially disadvantaged health professions students for the purpose of increasing the recruitment of such students to serve in the community with which they are familiar. This new initiative will allow the student more flexibility in fulfilling the service obligation. It is based on the premise that individuals may be more likely to enter health professions training if they know they can obtain financial assistance in exchange for providing health services in communities with which they are more familiar, even if the period of the service obligation were longer than what is normally required of NHSC obligors.

Minority Health Initiative

The program will offer all NHSC scholarship obligors the option of serving 150 percent of the service obligation for each of year of support in a HMSA selected from a listing of sites that have been more easily filled; or if a loan repayment recipient, receive a lesser amount of loan repayment support relative to the levels of support associated with NHSC assignments from the list of sites that are more difficult to fill. Obligors will continue to have the option of serving in a more difficult to fill site with a service obligation of one year for each year of support, or if a loan repayment recipient, receive the unreduced level of support.

Rationale for the Budget Request

The request of $63,882,000 will provide funds for State and Federal Loan Repayment and a Scholarship program, an increase of $55 million over the FY 1990 level. This increase which is part of the Minority Health Initiative will be specifically targeted to disadvantaged and minority health professions students. Beginning in FY 1991, added emphasis will be given to recruitment of disadvantaged and minority health professions students by specifically targeting such individuals for support and by modifying the service payback provisions to permit such individuals to fulfill their service obligation in areas with which they are familiar and in which they can be most effective. This new emphasis is based on the premise that individuals may be more likely to enter health professions training if they are able to obtain financial assistance in exchange for providing health services in communities with which they are familiar, even if the period of the service obligation were longer than what is normally required of NHSC obligors. Beginning in FY 1991 the program will offer all NHSC scholarship obligors the option of serving 150 percent of the service obligation for each year of support in a HMSA selected from a listing of sites that have been more easily filled; or if a loan repayment recipient, receive a lessor amount of loan repayment support relative to the levels of support associated with NHSC assignments from the list of sites that are more difficult to fill. Obligors will continue to have the option serving in a more difficult to fill site with a service obligation of one year for each year of support, or if a loan repayment recipient, receive the unreduced level of support.

HEALTH SERVICES IN UNDERSERVED NEIGHBORHOODS

For low income persons, the greatest barrier to receiving health services is often the cost of such services. However, non-financial barriers, such as clinic location, transportation, operating hours, and other factors are also impediments to timely and appropriate health care utilization and improved health.

Minority Health Initiative

This new program will address these barriers by making grants to community organizations, including community health centers, to support the provision of a full range of health and social services in clinics at or in close proximity to public housing units. The program will be established through a cooperative effort with the Department of Housing and Urban Development (HUD), HHS, and other appropriate Federal, State or local organizations.

A full range of primary and preventive health and social services will be provided including health care screening, detection, primary care, SSI, WIC, job training, and day care. Health practitioners will offer immunizations for preschool children; screening for cholesterol, high blood pressure, sickle cell disease, vision, hearing, and growth and development. In addition classes in drug abuse prevention, smoking cessation, HIV and other STD prevention; prenatal/parental education; education and services in the areas of nutrition, fitness, and environmental hazards such as lead poisoning; prevention and control of injuries; and other services that may meet the need of the particular community will also be offered.

The community based organizations funded under this program will operate during hours convenient to the residents to facilitate the use of the clinic referral services and would undertake other activities to eliminate non-financial barriers to receiving health care services.

Rationale for the Budget Request

The FY 1991 request of $35,000,000 will permit the funding of grants to community organizations, including community health centers. The number of grants will depend on the scope and service population of the projects selected for funding. However, based on the average cost of an urban CHC, it is anticipated that approximately 35 to 40 new grants could support providing health and social services to 200,000 residents of underserved neighborhoods.

HEALTH PROFESSIONS INSTITUTIONAL DEVELOPMENT

Faculty Development Component

The Faculty Development Component will provide grants to health professions schools, where enrollment historically consists of a majority of minority students, to support faculty and general institutional development.

Health professions schools in institutions whose student bodies historically have a majority of minority students find their resources very seriously strained by or inadequate to meet the high costs of top quality health professions training. The problem of small endowments is exacerbated by the schools' desire to maintain tuition at levels lower than the national average to assist in accommodating the severely limited financial resources of their

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student bodies. Consequently, these schools often lag behind others in availability of current technology, employ faculty with relatively limited post-doctoral training, and find it difficult to develop or sustain competitive curricula.

This program component, through provision of professional education enhancement resources, will support a two-phased faculty development activity. Through it, faculty of eligible health professions schools will be supported for a period of up to three years within the sponsoring school or another institution for post-doctoral training in relevant areas of science and pedagogy. Following completion of an approved training plan, a supplemental research award of up to $50,000 per year will be provided to faculty-trainees for up to two years to conduct relevant research at the sponsoring school. Priority will be given to areas in which sponsors report special needs, are of particular relevance to the minority or disadvantaged population, or are specialties in which the disadvantaged are particularly under-represented.

This program will be a natural complement to the existing Centers for Excellence (CFE) authority. Faculty enhancement under CFE does not allow for post doctoral training and research. Budgetary considerations for this component would be based on the identification of at least ten institutions meeting the criteria for selection, i.e., minority health profession schools.

Academic Reinforcement/Institutional Improvement Component

This component is intended to assist eligible schools in maintaining tuition levels reflecting the financial capacities of their students. The component is a formula based capitation program based on the number of full-time students in specified disciplines. Under this formula, eligible schools would be candidates for awards of up to $1,250 per full-time enrolled student. Schools of pharmacy, nursing, and health administration in eligible institutions would be eligible for awards of up to $750 per full-time enrolled student on the following basis: pharmacy, years 3, 4, and 5 of a five year curriculum; nursing, years 3 and 4 of a four year curriculum; and health administration, 2 years toward the masters or doctorate degree.

Rationale for the Budget Request

The FY 1991 request will provide $12,000,000 for both components of the Institutional Development program.

The request for the Faculty Development Component will provide $2.4 million in support for at least ten institutions meeting the criteria for selection, i.e., minority health profession schools.

The request for the Academic Reinforcement/Institutional Improvement Component will provide almost $9.6 million in support for approximately 10,250 students determined by a formula based capitation award.

Outputs

	1990	1991
Schools qualifying for $1,250/FTE 1/ students:	0	12
Students counted toward formula at $1,250/FTE students:	0	3,800
Schools qualifying for $750/FTE students:	0	55
Students counted toward formula at $750/FTE students:	0	6,450

1/ Full-time enrolled

COMMUNITY BASED RECRUITMENT AND SUPPORT

The Community Based Recruitment and Support program provides grants to support innovative community-based efforts to recruit potential health professions students from the community and support their health professions training.

Minority and disadvantaged students continue to be under represented in the health professions. While there are several Federal programs that provide assistance to disadvantaged students, they tend to focus directly on health professions students who apply for loans or scholarships, or on health professions schools which seek to improve their capacity to train minority health professionals. Many young individuals with the potential to be successful health professionals may be deterred from even considering such career goals by the large financial obstacles they face and a lack of understanding about the choices and opportunities that are available. Community-based organizations and institutions are in a good position to recognize and identify young people with the potential to become health professions students, and offer them the kind of information, encouragement, and support that they need to enter this career path. In turn, the communities can benefit from reciprocal services provided by these individuals after they have become health professionals.

This grant program will provide financial assistance to community organizations and institutions to support innovative projects to recruit health professions students from the community, assist minority and disadvantaged students to access health professions schools, and establish an obligation for service as a health professional in the local community. The length and nature of the service obligation would not be specified by the program, but would be one aspect of the grant proposal. Also, up to 25 percent of matching funds would be required. In addition to providing financial assistance, the Department would provide technical assistance in establishing contracts between the communities and the health professions students regarding the service obligation.

Given the central purpose of identifying and nurturing individuals who might not otherwise choose to enter health professions training, the program will be limited to proposals to recruit undergraduate students who have not yet entered health professions schools.

Grantees would identify local students at the undergraduate level with potential to be accepted by schools of medicine or osteopathy. This would involve a credential review, student interview and contract development. All student applications would be evaluated by a local advisory boards which would include, but not be limited to, representatives from city government, hospital boards, educational institutions, churches, civic organizations, local medical societies, and other relevant community groups. Project budgets would include, but not be limited to, personnel costs for staff publicity expenses, and student costs such as tuition, fees and stipends.

Health Care Delivery and Assistance

Authorizing Legislation - Titles III, VIII and XXVI of the Public Health Service Act, Section 427(a) of the Federal Coal Mine Health and Safety Act of 1977, and Public Law 79-658 (5 USC 7910).

	FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
Community health centers	$427,309,000	$438,309,000	+$11,000,000
Infant mortality initiative	31,579,000	35,708,000	+4,129,000
Black lung clinics	3,651,000	3,651,000	---
Migrant health	47,369,000	48,369,000	+1,000,000
Health care for the homeless	33,667,000	33,667,000	---
Advance funding	---	11,885,000	+11,885,000
National health service corps	41,837,000	42,361,000	+524,000
NHSC Recruitment	8,882,000	63,882,000	+55,000,000
Gillis W. Long Hansen's disease center	18,158,000	22,601,000	+4,443,000
Pacific basin initiatives	336,000	---	-336,000
Payment to Hawaii	3,217,000	3,217,000	---
Health care services in the home	2,961,000	---	-2,961,000
Native Hawaiian health care	1,283,000	1,283,000	---
Nursing loan repayment	982,000	---	-982,000
Health Services in Underserved Neighborhoods	---	35,000,000	+35,000,000
Federal employee occupational health (Reimbursable)	(36,000,000)	(39,000,000)	+(3,000,000)
Total Budget Authority	$621,231,000	$739,933,000	+$118,702,000

Health Care Delivery and Assistance

Community Health Centers:
Authorizing legislation -- Section 330 of the Public Health Service Act.

1991 Authorization: Such sums as necessary.

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority	$427,309,000	$438,309,000	+$11,000,000

Purpose and method of operation

This activity provides essential prevention-oriented primary health care services to medically underserved populations such as those without access to appropriate health care because they lack insurance, who live in communities without sufficient health resources, who have health concerns not met by traditional medical care, or who face other barriers such as race, language or culture. Targeted disadvantaged groups with special health needs have been expanded to include low income minorities and others at risk in urban, rural or frontier areas, pregnant women and children (especially among populations with disproportionately high infant mortality rates), the uninsured, the homeless, substance abusers, HIV infected persons (a 62 percent increase in the last two years), and the elderly. The program gives these underserved and medically indigent persons access to community based primary care services to improve their health outcomes and reduce infant mortality rates in areas of States and Territories where there are financial or geographic barriers to health care. Primary health care services are comprehensive and include diagnosis and treatment as well as health promotion and education to encourage healthy behavior among individuals, families and communities. In addition, case management approaches for these populations assure that patients' needs are thoroughly assessed, that a comprehensive health plan is developed, and that necessary services are arranged, monitored, evaluated and followed up. Continuing program strategies include the retention and recruitment of health professionals, support for minority professions training, and working with State health departments. The goal of the program is to use limited Federal resources to fund these minority health improvement services while continuing to maximize public (State, local) and private non-grant revenues, particularly third party reimbursements (Medicaid, Medicare and private insurance). During FY 1990, primary care services will be made available to approximately 5.4 million medically underserved persons through Community Health Centers (CHCs).

In FY 1989, the operation for this program was changed from one with regional to central focus as required by P.L. 100-386. The new process has assured that primary health care services delivery goals and policies are consistent and nationally equitable, and that clinical, financial and administrative aspects of the program are accountable and responsive. National oversight of the program has resulted in standardized formats for applications and reviews,

Community health centers:

quality assurance provisions, multi-year planning periods for most grantees to ensure stable funding and sufficient evaluation, and increasing use of automation throughout the entire process.

CHC activities include placement of new and minority primary care providers (including NHSC obligors), support for increased costs of malpractice coverage, support of improved compensation packages that enable grantees to retain/recruit highly qualified providers (including minority providers) and the expansion of the scope/range of services where justified. Grantees are required to comply with jurisdictional fire and life safety codes. Centers are to maximize reimbursements from third party and patient revenues by ensuring that those organizations are billed for all services provided to insured patients and charging those who have no insurance on sliding fee schedules.

Each center must have a fee schedule for all chargeable services, updated annually, covering all reasonable costs and comparable to prevailing fee schedules in the area. In addition, each must have a method for discounting or adjusting fees based upon the patient's income and family size, related to the current Federal Poverty Income Guidelines and assuring that no individual is denied health services based upon his/her ability to pay. These sliding fee schedules are periodically reviewed to ensure that the charges reflect the cost of delivering the services. Program emphasis will continue to be placed on assuring maintenance of the level of State/local revenues which support prenatal and perinatal services, indigent care funding, manpower resources, direct primary care grants, and sources of capital funding.

Funding levels for the past five years were as follows:

1986	$400,000,000
1987	$419,550,000
1988	$396,260,000
1989	$414,812,000
1990	$427,309,000

Rationale for the Budget Request

The FY 1991 request of $438,309,000 is an increase of $11,000,000 over the FY 1990 current estimate. Of this amount, $9 million will be used in retention and recruitment activities and will support a 15 percent increase for 50 percent of CHC physicians. By providing this increase in personnel compensation, it is anticipated that current staff at the CHC's will be encouraged to stay or, if they elect to leave, the CHC's will be better able to recruit replacements. Such increases, though insufficient to solve the total problem, are a necessary interim step to address the current and projected shortage of physicians at Community and Migrant Health Centers.

Community health centers:

The remaining $2 million will be used for a one-time grant to purchase up to 75 vans to be used in the transport of pregnant women and mothers to community health centers for perinatal services as part of the Secretary's initiative to reduce infant mortality. The program will seek additional resources from the private sector and State and local health agencies with the goal of obtaining donated resources in the form of additional vans, operating personnel and peripheral costs.

To support the greatest number of medically underserved populations, the CHC program will continue to encourage grantees to increase the non-Federal share of funds used to support CHC operations. As shown on the Sources of Funding table, the amount of support CHCs have received from non-Federal sources has increased in recent years. A particularly good opportunity for increasing the portion paid by third parties is the expanded Medicaid coverage for infant mortality prevention, and maternal and child health services which was utilized in FY 1990 and will be built upon in FY 1991.

Program Outputs

	FY 1989 Actual	FY 1990 Current Estimate	FY 1991 Estimate
Community Health Centers	$414,812,000	$427,309,000	$438,309,000
Number of Grantees	550	550	550
Persons Served	5,350,000	5,350,000	5,350,000
Vans	---	---	Up to 75

Health Care Delivery and Assistance

Community health centers:

SOURCES OF FUNDING FOR COMMUNITY AND MIGRANT HEALTH CENTERS (C/MHC) (Dollars in Millions)

	FY 1989 Actual	FY 1990 Current Estimate	FY 1991 Estimate
Community Health Centers	$415	$427	$438
Migrant Health Centers	46	47	48
Infant Mortality Initiative	21	32	36
AIDS	---	10	13
Subtotal, C/MHC	482	516	535
Medicare	50	50	50
Medicaid	147	165	185
Other 3rd Party	69	69	73
Patient Fees	97	100	106
State/Local/Other	153	166	175
Total, C/MHC Funding	998	1,066	1,124

Health Care Delivery and Assistance

Infant Mortality Initiative:
Authorizing legislation--Sections 329 and 330 of the Public Health Service Act.

1991 Authorization: $37,500,000

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	$31,579,000	$35,708,000	+$4,129,000

Purpose and method of operation

This program is designed to reduce infant mortality by increasing access to care. The funds requested are used to support supplemental grants to existing Community and Migrant Health Centers to expand prenatal and perinatal systems, enhance the provision of primary and supplemental health services, and improve the access of pregnant women and children to needed services. This is accomplished through a case-managed, comprehensive approach which focuses on the integration and coordination of appropriate services throughout the pregnancy and first year of life. Components of this program include:

a) effective financing arrangements that will improve access, content and quality of prenatal and perinatal systems of care;

b) coordinated systems of care which are designed to assure that the overall health needs of pregnant women and infants are assessed, and the full range of services are provided;

c) systems of care designed to incorporate into the delivery model case management, and enhanced health services responsive to the medical as well as the social and behavioral needs of pregnant women and infants;

d) assisting pregnant women to identify and obtain the total array of services needed to coordinate resourses with State Medicaid/MCH and WIC programs to provide user friendly entry into multiple programs as one element of the Secretary's "one stop shopping initiative"; and

e) a focus on pregnant females age 15 years and under with effective prenatal, postnatal and pediatric care which actively encourages ongoing participation in a primary health care system.

Case management/case coordination is a process for locating and integrating primary care and other specialized services on behalf of the recipients. The case manager assures that all appropriate services are provided to a pregnant

Infant Mortality Initiative:

woman and, after delivery, to her child according to a care plan developed by the primary care provider. These services include, but are not limited to: reduction of non-financial barriers to care, such as translation assistance, patient record transfer, transportation and child care; reduction of financial barriers through assistance in enrollment in Medicaid; patient education regarding related medical and health services, assistance and resources that are available in community and how to access them; and parenting and child birth education classes. The case manager also uses the plan to assess achievement of desired outcomes and initiates appropriate follow-up as needed. The case manager role is not limited to the primary provider and may be assumed by any health professional, often a nurse or social worker.

Each center assesses its prenatal and perinatal system in terms of the needs of its community, the extent to which these needs are being met and by whom, and the extent to which there is a measurable difference in the pregnancy outcome.

Funding levels for the past five years were as follows:

1986	---
1987	---
1988	$20,105,000
1989	$20,550,000
1990	$31,579,000

Rationale for the Budget Request

The FY 1991 request will provide $35,708,000, an increase of $4,129,000 above the FY 1990 current estimate. This level will provide case managed services to an additional 5,000 mother/infant pairs for a total of 75,000. Total perinatal capacity will increase from 175,000 to 190,000 mother/infant pairs, which is made possible for the most part by increasing Medicaid reimbursement under the case managed approach. The number of grantees will increase from 263 to 285.

Output data	FY 1989 Actual	FY 1990 Current Estimate	FY 1991 Estimate
Budget Authority ($000)	$20,550	$31,579	$35,708
Case managed services	52,000	70,000	75,000
Number of awards to C/MHCs	206	263	285
Total perinatal capacity in C/MHCs	155,000	175,000	190,000

Black Lung Clinics:
Authorizing legislation--Federal Coal Mine Safety and Health Act of 1977, Section 427(a).

1991 Authorization: $10,000,000

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority:	$3,651,000	$3,651,000	---

Purpose and method of operation

This program, through project grants or contracts, assists public and private entities to establish and operate clinics which provide for the diagnosis, treatment and rehabilitation of active and retired coal miners with respiratory and pulmonary impairments. The major function of these clinics is to provide services to minimize the effect of respiratory and pulmonary impairments in coal miners, and to reduce the incidence of expensive inpatient treatment of these conditions.

Funding levels for the past five years were as follows:

1986	$3,400,000
1987	$3,400,000
1988	$3,255,000
1989	$3,216,000
1990	$3,651,000

Rationale for the Budget Request

The FY 1991 request of $3,651,000 is equal to the FY 1990 current estimate and will provide for 15 grant awards to continue providing access to health care services to 32,000 victims of black lung disease at 38 delivery sites.

	1989 Actual	1990 Current Estimate	1991 Estimate
Budget Authority:	$3,216	$3,651	$3,651
Number of Centers:	38	38	38
Persons Served:	32,000	32,000	32,000

Health Care Delivery and Assistance

Migrant Health Centers:
Authorizing legislation -- Section 329 of the Public Health Service Act.

1991 Authorization: Such sums as necessary.

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	$47,369,000	$48,369,000	+$1,000,000

Purpose and method of operation

The Migrant Health Center (MHC) program, in conjunction with State and local resources, provides Federal support for the delivery of comprehensive primary health care services to migrant and seasonal farmworkers and their families. These services are provided in primary care centers and projects, birthing centers, and in hospitals reimbursed by the Health Care Financing Administration through an interagency agreement with BHCDA.

A migrant or seasonal farmworker is an individual whose principal employment within the last 24 months is in agriculture. Access to health care for this group is difficult to achieve because of their lifestyle, language and cultural differences, and economic status. In addition, most States consider migrants temporary residents, thus making them ineligible for Medicaid. In FY 1989, a total of 500,000 migrant and seasonal farmworkers were served through 105 grantees operating about 400 clinics located in rural areas in 40 States and Puerto Rico. About 65 percent of the centers also receive funds from the Community Health Centers (CHC) program. As with the CHC program, MHC program operation was changed to a central focus as required by P.L. 100-386.

Migrant health centers, either through their employed staff or through contracts with other public or private entities, provide health delivery services including services of physicians and, where feasible, services of physicians' assistants and nurse clinicians, diagnostic laboratory and radiology services, preventive health services, infant mortality activities authorized by P.L. 100-386, transportation, preventive dental services and pharmaceutical services. Case management approaches are used to ensure the delivery of these essential health care services that must be coordinated for a transient population. The program is continuing to conduct environmental health assessment activities including detection and alleviation of unhealthful conditions associated with water supply, sewage treatment, solid waste disposal, rodent and parasitic infestation, and field sanitation. The program also conducts accident prevention programs, programs to eliminate excessive pesticide exposure, and programs to improve housing.

Migrant Health Centers:

The program emphasizes the coordination of Federal, state and local resources to service migrant and seasonal farmworkers and their families through the utilization of existing health care facilities. Program emphasis will be focused on increasing the health service capacity of the community to provide services to migrant and seasonal farmworkers utilizing volunteers and the private sector.

As referenced in the Community Health Center program request, MHC will continue to encourage grantees to increase the non-Federal share of funds used to support MHC operations. This source of non-Federal funding has increased in recent years and is expected to continue due largely to the coverage paid by third parties since Medicaid expanded coverage to include infant mortality prevention and maternal and child health services.

Funding levels for the past five years were as follows:

1986	$45,400,000
1987	$45,400,000
1988	$44,423,000
1989	$45,646,000
1990	$47,369,000

Rationale for the Budget Request

The FY 1991 request of $48,369,000 is an increase of $1,000,000 over the FY 1990 current estimate and would provide for continued health care services to approximately 500,000 migrants and seasonal farmworkers and their families.

Currently, C/MHCs are paying only 60 to 75 percent of the average renumeration that primary health care professionals in other settings are paid. To narrow this gap, the increase of $1,000,000 will be used to provide 50 percent of MHC physicians a 10 to 15 percent increase in personal compensation. It is anticipated that this increase in personal compensation will encourage current staff at the MHCs to stay or, if they elect to leave, that MHCs will be better able to recruit replacements.

Program Outputs

	FY 1989 Actual	FY 1990 Current Estimate	FY 1991 Estimate
Budget Authority	$45,646,000	$47,369,000	$48,369,000
Number of Clinics	400	400	400
Persons Served	500,000	500,000	500,000

Health Care Delivery and Assistance

Health care for the homeless:
Authorizing legislation--Section 340 of the Public Health Service Act.

1991 Authorization: $66,200,000

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority:	$33,667,000	$33,667,000	---
Advance Authority:	---	11,885,000	+11,885,000

Purpose and Method of Operation

The health care for the homeless program, through project grants to local public and private non-profit entities, provides for the delivery of primary health care services, alcohol and substance abuse services, and mental health services to homeless populations of the U.S.

Awarding of grants depends on the applicants' abilities to demonstrate broad based community participation and support as well as linkages with other community providers of critical support needs of homeless populations, such as the provision of emergency shelter and food. In addition, grantees are required to provide the following services: primary health care services at locations that are accessible to homeless persons; substance abuse services, which may include detoxification and residential treatment for substance abuse provided in settings other than hospitals; 24-hour emergency health services; a system for referrals to mental health services; and a system for inpatient referral, outreach, and aid in establishing eligibility for and obtaining services under entitlement programs.

Funding levels for the past five years were as follows:

1986	---
1987	$46,000,000
1988	$14,361,000
1989	$14,820,000
1990	$33,667,000
1991 Advance Funding	$11,885,000

Rationale for the Budget Request

The FY 1990 appropriation provided a post-sequester level of $33,667,000 to be available during FY 1990. This level will fund 92 projects through September 30, 1990. Advanced funding of $11,885,000 will complete the annual cycle of these projects, funding them through December 31, 1990.

The FY 1991 request of $33,667,000 will continue 92 projects for a nine month beginning January 1, 1991 and ending September 30, 1991.

Health Care Delivery and Assistance

Health care for the homeless:

Output Data

	FY 1989 Actual	FY 1990 Current Estimate	FY 1991 Estimate
Number of Projects	109	92	92
Persons served	363,500	346,500	335,000 1/

1/ Assuming operation for a full 12 month period. Funds requested in this budget provide only nine months of support.

Health Care Delivery and Assistance

National Health Service Corps:

Authorizing legislation--Sections 331-338, 338C, and 338F of the Public Health Service Act.

1991 Authorization: Legislation expires September 30, 1990

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	$41,837,000	$42,361,000	+$524,000

Purpose and method of operation

The purpose of the National Health Service Corps (NHSC) is to improve the capacity to provide health services in Health Manpower Shortage Areas (HMSA), and improve access to health care in these areas through the appropriate placement and support of health professionals. In these efforts the program is part of an integrated strategy for reducing physician shortages in the most difficult to staff areas. In the conduct of this activity, the NHSC program funds the salary and benefits costs of Federally employed assignees, and the travel and transportation costs of Federal and non-Federal assignees. The program also funds a variety of clinical and professional support activities. These activities include practice management education and other training including, but not limited to, training in the latest methods of treating AIDS patients, training in the diagnosis and treatment of I.V. drug abusers, and in the treatment of homeless patients. Also supported are continuing education activities required to maintain licensure. These services are offered to the entire cadre of NHSC field staff in order to support their practices and provide added incentives to remain in the NHSC.

The NHSC activity also supports a program designed to recruit volunteer health professionals into the NHSC and into the Commissioned Corps of the PHS to maintain the Federal field strength. In 1990 it is anticipated that the program will recruit and place over 500 volunteers for assignment to underserved areas.

Technical assistance is provided to States and federally supported entities to improve their expertise in recruitment and retention of practitioners. These activities are critical to retaining a cadre of practitioners committed to providing service to the underserved. Funds are also used to support cooperative agreements with States which allow the NHSC to utilize the expertise of State recruitment and practice management staff to support NHSC practitioners. Participating States have been responsible for implementing major portions of the NHSC placement policy and, more importantly, identifying and developing the most needy and viable sites for the placement of NHSC scholarship obligors. As a benefit of continued State participation in the development, validation and management of sites, the NHSC has realized

National Health Service Corps:

significant improvements in the targeting of assignees to the most hard to fill areas, in the quality of matches between individual assignees and communities, in the development of ties between communities and providers which increase the probability of long-term retention, and in the overall monitoring of field activities.

The NHSC permits obligors to fulfill their obligations as private practitioners in HMSAs through the Private Practice Option (PPO), Private Placement Assignments (PPA) or Private Salaried Assignments (PPS). The PPO assignments are made to shortage area communities which have a sufficient economic base to support health providers as traditional fee-for-service practitioners. The PPA and PPS assignees are subject to the personnel system of the entity to which they are assigned and receive at least the same income as they would receive as Federal civil service employees of the NHSC. Approximately 50 percent of support costs for PPA obligors are provided through awards of Community and Migrant Health Center grant funds to health centers. Funding for PPS assignments is provided from other, non-Federal resources available to the employing entity.

In recent years, most assignments have been to Community and Migrant Health centers. Because of the decline in the number of scholarships and the continuing difficulty in attracting physicians to the most difficult to staff sites, it is anticipated that Community Health Centers will have a shortfall of approximately 450 doctors in 1990.

Funding levels for the past five years were as follows:

1986	$58,500,000
1987	$39,939,000
1988	$35,593,000
1989	$39,866,000
1990	$41,837,000

Rationale for the Budget Request

The FY 1991 request of $42,361,000 is an increase of $524,000 for the FY 1991 pay raise over the FY 1990 current estimate.

The combination of Federal, PPO, PPS, and PPA end-of-year field strength will increase from 1,751 in FY 1990 to 2,216 in FY 1991. The FY 1991 funding level will support an estimated Federally employed end-of-year field strength of 490.

Health Care Delivery and Assistance

National Health-Service Corps:

	1988	1989	1990	1991
Combined Field Strengths				
Federally employed field staff	322	278	383	490
Private practice option	198	96	52	46
Private placement salaried	473	353	102	88
Private placement assignments	1,123	1,221	1,214	1,592
Combined EOY Field Strengths	2,116	1,948	1,751	2,216
Distribution of New Scholarships and Loan Repayments				
To NHSC Federal	38	27	35	32
To Private Practice Option	6	2	3	12
To Private Placement Salaried	66	30	2	3
To Private Placement Assignment	108	204	151	424
To IHS/BOP	115	27	25	10
Subtotal	333	290	216	481
Distribution of Volunteers				
To NHSC Federal	---	58	95	95
To Private Practice Option	---	---	---	---
To Private Placement Salaried	---	---	---	---
To Private Placement Assignment	---	219	350	350
To IHS/BOP	---	133	110	110
Subtotal	---	410	555	555
Total, Obligors & Volunteers	333	700	771	1,036

Health Care Delivery and Assistance

National Health Service Corps:

	1989 Actual	1990 Current Est.	1991 Estimate
Budget Data			
Budget Authority - Total	$39,866,000	$41,837,000	$42,361,000
Field Operation............	39,816,000	41,837,000	42,361,000
Loan Funding (Section 338(D)	50,000	---	---
Assignee Data			
Federal Assignments:			
In rural areas...........	190	260	333
In urban areas...........	88	123	157
Total................	278	383	490
PPO/PPA/PPS Assignments:			
In rural areas...........	1,085	890	1,123
In urban areas...........	585	478	603
Total................	1,670	1,368	1,726
Number of people served			
by Federal physicians.........	275,000	380,000	500,000
by PPO/PPA/PPS physicians.....	2,400,000	1,900,000	2,400,000
Total people served.......	2,675,000	2,280,000	2,900,000

Health Care Delivery and Assistance

National Health Service Corps Recruitment:

Authorizing Legislation -- **Sections 338A, B, D,F and H of the Public Health Service Act and pending legislation.**

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority:	$8,882,000	$63,882,000	+$55,000,000

Purpose and method of operation

The basic purpose of this program is to recruit health care practitioners and make them available for service in Health Manpower Shortage Areas (HMSA) throughout the country. The program also seeks to attract minority and disadvantaged health professions students to the NHSC and provide an opportunity for them to serve in communities with which they are familiar that are also designated as HMSAs. In exchange for service commitments, the program awards scholarships to health professions students, enters into loan repayment agreements with health professionals ready to begin service, and makes grant awards to States for the purpose of supporting State loan repayment agreements. Scholarship and Federal loan repayment obligors will have the option of serving one year for each year of support if they agree to be assigned to a site that is more difficult to staff. Alternatively, obligors may serve one and one-half years for each year of support or receive reduced loan repayment support in exchange for being able to select from a list of HMSA sites that have been more easily staffed. This provision is part of the effort to attract additional minority and disadvantaged health professions students and would allow them to serve in areas with which they are more familiar and in which they can be most effective. New legislation will be required to implement this second option of longer service. As is the tradition of the program, preference is given to minority and financially disadvantaged health professions students and practitioners.

National Health Service Corps Scholarships:

The National Health Service Corps (NHSC) scholarship activity seeks to assure an adequate supply of trained physicians, dentists, and nurses for the National Health Service Corps.

To be eligible to participate in the Scholarship program, an individual must: (1) be accepted for enrollment, or be enrolled, as a full time student (A) in an accredited educational institution in a State and (B) in a course of study or program, offered by such institution and approved by the Secretary leading to a degree in medicine, osteopathic medicine, dentistry, or other health professions. In disseminating application forms and contract forms to

National Health Service Corps Recruitment:

individuals desiring to participate in the Scholarship program, the Secretary shall include with such forms: (1) a fair summary of the rights and liabilities of an individual whose application is approved by the Secretary; (2) information respecting meeting a service obligation through private practice under an agreement under Section 338 C and such other information as may be necessary for the individual to understand the participation process in the Scholarship program and Service in the corps. In determining which applications under the Scholarship program to approve the Secretary shall give priority: (1) first to applications made by individuals who have previously received scholarships under the Scholarship program and (2) to applicants who had previously received Exceptional Financial Need Scholarships.

An individual becomes a participant in the Scholarship program only upon the Secretary's approval of the individual's application, and the Secretary's acceptance of the contract submitted by the individual. The Secretary shall report to Congress on March 1 of each year on the number and type of health professions training, students receiving scholarships and the educational institution at which students are receiving their training, and the number of applications filed under this section in the school year; and the amount of tuition paid in the aggregate.

National Health Service Corps Loan Repayment Programs:

The passage of the National Health Service Corps Amendments of 1987, P.L. 100-177, authorized the establishment of the Federal and Grants to State Loan Repayment programs. The implementation of this activity has provided mechanisms for attracting health professionals to targeted underserved areas when their training is completed or nearly completed. Agreements with the program's participants closer in time to the point of service contribute to an improved mutual understanding of program requirements and the participants' expectations.

The maximum Federal share under the State-based loan repayment program is 75 percent of the agreement, not to exceed $20,000 per year for each year of professional education. The Federal program provides for 100 percent repayment, also for a maximum of $20,000 per year of professional education. Minimum length of service for loan repayment obligors under both the State and Federal programs is two years.

Funding levels for the past five years were as follows:

1986	$2,300,000
1987	$2,300,000
1988	$4,117,000
1989	$7,906,000
1990	$8,882,000

National Health Service Corps Recruitment:

Rationale for the Budget Request

The request of $63,882,000 will provide funds for State and Federal Loan Repayment and a Scholarship program, an increase of $55 million over the 1990 level. This increase,which is part of the Minority Health Initiative will be specifically targeted to disadvantaged and minority health professions students. Beginning in 1991 added emphasis will be given to recruitment of disadvantaged and minority health professions students by specifically targeting such individuals for support and by modifying the service payback provisions to permit such individuals to fulfill their service obligation in areas with which they are familiar and in which they can be most effective. This new emphasis is based on the premise that individuals may be more likely to enter health professions training if they are able to obtain financial assistance in exchange for providing health services in communities with which they are familiar, even if the period of the service obligation were longer than what is normally required of NHSC obligors. Beginning in 1991, the program will offer all NHSC scholarship obligors the option of serving 150 percent of the service obligation for each of year of support in a HMSA selected from a listing of sites that have been more easily filled; or if a loan repayment recipient, receive a lesser amount of loan repayment support relative to the levels of support associated with NHSC assignments from the list of sites that are more difficult to fill. Obligors will continue to have the option serving in a more difficult to fill site with a service obligation of one year for each year of support, or if a loan repayment recepient, receive the unreduced level of support.

Mechanisms of Support:

The ultimate distribution of funding among scholarships, Federal and State loan repayments will be determined during FY 1991 based on an assessment of the program needs and opportunities and the success of the State and Federal loan repayment programs in FY 1989 and 1990.

The primary goal of this program is to place practitioners as quickly as possible in underserved areas of greatest need for which the National Health Service Corps is the provider of last resort. To the extent the States can contribute in this effort, the State loan repayment program is the first option considered. However, it is essential that the States assign obligors to the areas of highest need as defined under the HMSA designation. These sites are often isolated rural or less desirable urban locations and are very difficult to staff and the States have not been successful in attracting practitioners to them. Thus far, the States have demonstrated very limited success in placing practitioners in their current sites and essentially no success in attracting providers to high priority sites. If the State loan repayment program cannot prove to be a better instrument in this crucial area, then other mechanisms of attracting health practitioners must be employed.

National Health Service Corps Recruitment:

The second mechanism of choice would be the Federal loan repayment program. The Federal Loan Repayment program can be more effective in assigning obligors to the highest priority areas than the State Loan Repayment program because the Federal program is able to recruit obligors from States having a lesser concentration of underserved areas and assign them to States with a greater concentration of underserved areas. The State Loan program, however, is generally limited to recruiting from within the State. As is the case with the State Loan Repayment program, the Federal Loan repayment program offers the advantage of immediate service, less likelihood of default, and a better understanding between the obligor and the program regarding their respective expectations and responsibilities. However, the aspects of the loan repayment program that are advantageous to the government are also disadvantages in recruitment. Contracts are offered to individuals who have nearly completed their professional training. These individuals have a variety of employment options, their educations have been funded at least on an interim basis, and they are more likely to have family and attendant financial responsibilities. To the extent that the loan repayment programs cannot staff most difficult sites to fill, the third option for recruitment, the scholarship program must be used.

The scholarship program has the potential and has demonstrated the ability to attract large numbers of individuals for obligated service in the most difficult areas to staff and is usually the most beneficial to minority and disadvantaged health professions students. The disadvantage of the scholarship program is that individuals recruited will not be available for service for several years. There has also been criticism that the program experienced significant default rates. However, at this time 96 percent of the 13,000 program participants have met their obligations either through service or financial payback and the new program will be smaller and more focused and the individuals selected more thoroughly screened. Potential obligors will be interviewed to determine interest and commitment to service to the underserved, commitment to primary care and an absolute understanding that the initial service assignment will be at the discretion of the Federal government. This reestablished scholarship program will enable us to recruit and provide physicians to isolated rural areas around the country and to certain underserved urban areas.

Program Outputs

	FY 1989	FY 1990	FY 1991
Scholarships	42	1/	2/
Federal Loan Repayment Agreements	112	1/	2/
Grants to States for Loan Repayment Agreements	7	To be determined	

National Health Service Corps Recruitment:

1/ The total number of scholarships and loan repayment agreements could approach 150 depending on the mix of funding by mechanism, the number of years of support per student, and the cost of the students' medical education.

2/ The total number of scholarships and loan repayment agreements could approach 750 depending on the mix of funding by mechanism, the number of years of support per student, and the cost of the students' medical education.

Health Care Delivery and Assistance

Gillis W. Long Hansen's Disease Center:
Authorizing legislation -- Titles III, Section 320 and XXVI of the Public Health Service Act.

1991 Authorization: **Indefinite**

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority	$18,158,000	$22,601,000	+$4,443,000
(FTEs)	(300)	(200)	(-100)

Purpose and method of operation

This activity supports the Hansen's Disease program which consists of the Gillis W. Long Hansen's Disease Center at Carville, Louisiana and the Contract Patient Care program for Hansen's Disease (HD) patients. The Gillis W. Long Hansen's Disease Center offers comprehensive and specialized health care to Hansen's Disease patients and conducts medical education, training, and research. Contract Patient Care provides for regionalized care of Hansen's Disease patients on an outpatient basis and facilitates coordination with local health agencies to assure appropriate care for HD patients. This program provides an effective and less costly alternative to treatment at Carville.

The HD population in the U.S. is approximately 6,000. Each year about 55 admissions and 110 readmissions occur at Carville. Since 1988, no long term custodial care admissions have been authorized. Inpatient programs at Carville concentrate on specialized procedures with short lengths of stay. In addition to providing specialized therapy to HD patients, the Center serves as an international clearinghouse for HD information and research, and conducts a major international training effort through seminars at Carville and teaching engagements abroad under the auspices of the World Health Organization.

Research accomplishments include the identification of a potential anti-leprosy drug which is now being tried in Hansen's Disease subjects, the manufacture and distribution of thalidomide for the outpatient management for reactive episodes (the most common cause of deformity), and the manufacture and distribution of lepromin skin tests (approximately 945 thousand doses to date).

Gillis W. Long Hansen's Disease Center:

Funding levels for the past five years were as follows:

1986	$19,103,000
1987	$19,396,000
1988	$18,179,000
1989	$18,276,000
1990	$18,158,000

Rational for the Budget Request

The FY 1991 request of $22,601,000 is an increase of $4,443,000 over the FY 1990 current estimate. This request supports for the first year of implementation of the strategic plan for the Gillis W. Long Hansen's Disease Center. The plan recommends:

1. Continuing the Federal commitment to Hansen's Disease while expanding the mission to include research, rehabilitation and education on other insensitive hand and foot conditions such as those associated with diabetes.
2. Contracting out of all long-term care at the Center (current long-term residents would retain the privilege of living out their lives at Carville).
3. Creating a National Hansen's Disease Center consisting of centers for Hansen's Disease research, rehabilitation, and training and education to be located in Baton Rouge in leased facilities.

The plan will be budget neutral over the period of implementation. It will be necessary to conduct a reduction-in-force (RIF) procedure as a result of the elimination of positions associated with support services functions that are to be assumed by a contractor. The number of actual terminations will be minimized through offerings of early retirement, reassignments, transfer to other federal agencies, or transfer to the private contractor assuming the support functions at Carville.

Program Outputs

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Carville			
Average Daily Patient Load	187	182	177
Patient Days	66,360	65,860	62,860
Outpatient Visits	3,436	3,600	3,800
Contract Patient Care:			
Number of Participants	3,724	3,900	4,100

Health Care Delivery and Assistance

Pacific basin initiatives:
Authorizing legislation--Title III of the Public Health Service Act.

1990 Authorization: Indefinite

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	$336,000	---	-$336,000

Purpose and method of operation

Funding for this initiative, as described in the U.S. Public Health Service's "Report on Health Services in the United States Pacific Island Jurisdictions", was used to provide for projects to build capacity and improve health services and systems, particularly preventive health services, and to provide technical assistance to carry out such projects in the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau. Current priorities are focused on mental health, substance abuse, epidemiological issues, maternal and child health, and environmental health concerns.

Funding levels for the past five years were as follows:

1986	$2,500,000
1987	$1,500,000
1988	$1,149,000
1989	$741,000
1990	$336,000

Rationale for the Budget Request:

No funds are requested for this program in FY 1991. Funding provided during FY 1987-90 supported 60 projects which were deemed to have had the maximum positive impact on the deficiencies noted in the Pacific Initiative Report. Additional funding for this activity is not necessary.

	FY 1989 Actual	FY 1990 Current Estimate	FY 1991 Estimate
Budget Authority ($000)	$741	$336	---
Number of projects	24	18	---

Health Care Delivery and Assistance

Payment to Hawaii:
Authorizing legislation--Title III of the Public Health Service Act.

1991 Authorization: Indefinite

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority:	$3,217,000	$3,217,000	---

Purpose and method of operation

Payments are made to the State of Hawaii for the care and treatment in its facilities of persons with Hansen's disease, at a per diem rate not greater than the comparable per diem operating cost per patient at the Gillis W. Long National Hansen's Disease Center, Carville, Louisiana. HRSA also has a separate contract with the State of Hawaii to augment the State's existing outpatient care program. In FY 1991, the Hansen's Disease program in Hawaii will support about 4,000 outpatient visits with an average daily inpatient load of 92 persons afflicted with Hansen's disease.

Appropriated funds are paid to assist the State of Hawaii to cover the actual expenses. Expenses above the level of the appropriated funds are borne by the State of Hawaii.

Funding levels for the past five years were as follows:

1986	$3,300,000
1987	$3,300,000
1988	$3,159,000
1989	$3,260,000
1990	$3,217,000

Payment to Hawaii:

Rationale for the Budget Request:

The request of $3,217,000 is the same as the FY 1990 current estimate and represents approximately 68 percent of the anticipated total cost of $4,722,380 to the State of Hawaii.

Other Information:

	1989 Estimate	1990 Estimate	1991 Estimate
Average daily patient census	92	92	92
Patient days	33,780	33,780	33,750
Inpatient per diem cost	$119.75	$124.54	$129.52
Outpatient visits	4,236	4,000	4,000
Per visit cost	$81.14	$84.39	$87.77
Total program cost	$4,388,864	$4,544,521	$4,722,380
Appropriation requested	$3,260,000	$3,217,000	$3,217,000
Percent of estimated cost supported by request	74%	71%	68%

Health Care Delivery and Assistance

Health care services in the home - Demonstration grants:

Authorizing legislation--Sections 395 - 397 of the Public Health Service Act.

1991 Authorization: Legislation expires September 30, 1990

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority:	$2,961,000	---	-$2,961,000

Purpose and method of operation

The Health Care Services in the Home Demonstration program provided funding to make grants to approximately 4 States for demonstration projects to enable States to: 1) identify and assist low-income individuals who could avoid institutionalization or prolonged hospitalization if home medical or other health services were made available; 2) pay costs of providing health services in the home; and, 3) coordinate the provision of health services and other long-term care services in the home. Twenty-five percent of the individuals who benefitted from the services were 65 years of age or older. Participating States are required to identify the number of individuals who will receive services, the average cost of services per person, and how these activities will be coordinated with similar Federal and non-Federal programs.

Funding levels for the past five years were as follows:

1986	$1,500,000
1987	---
1988	$4,787,000
1989	$2,470,000
1990	$2,961,000

Rationale for the Budget Request

No funds are requested for this program since funding is provided annually to home health agencies through the Medicare and Medicaid programs.

Health Care Delivery and Assistance

Native Hawaiian Health Care

Authorizing Legislation -- Title III of the PHS Act and Public Laws 100-579 and 100-713.

1991 Authorization: $7,800,000

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority:	$1,283,000	$1,283,000	---

Purpose and method of operation

The purpose of this activity is to improve the health status of Native Hawaiians by making primary care services and health promotion and disease prevention services available to them. Ultimately, the activity will support up to nine Native Hawaiian Health Centers which will deliver health promotion and disease prevention services, as well as primary care services, to Native Hawaiians. This activity also supports a health professions scholarship program for Native Hawaiians.

Current activities include the support of the development of a comprehensive health care master plan, support for related administrative costs of the Papa Ola Lokkahi and a health professions scholarship program.

Rationale for the Budget Request

The FY 1991 request of $1,283,000 is the same amount as the FY 1990 current estimate. In 1991, upon completion of the master plan, funds will be available to begin development of centers for the delivery of health services.

Health Care Delivery and Assistance

Nursing Loan Repayment:

Authorizing Legislation -- Sections 834A and 836(h) of the Public Health Service Act

1991 Authorization: $5,000,000

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority:	$982,000	---	-$982,000

Purpose and method of operation

This activity offers loan repayment to nurses in exchange for an agreement to serve not less than 2 years in a public hospital, a community or migrant health center, a rural health clinic, an Indian Health Service health facility, a native Hawaiian health center, or a health facility determined by the Secretary to have a critical shortage of nurses.

Rationale for the Budget Request

No funds are requested for this program. Funds that can be used for the support of loan repayments for nurses are requested in the National Health Service Corps recruitment activity.

Health Care Delivery and Assistance

Health Services in Underserved Neighborhoods:

1991 Authorization: Title III of the PHS Act plus legislation pending.

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority:	---	$35,000,000	+$35,000,000

Purpose and Method of Operation

This program would establish discretionary grants through a cooperative effort with HUD and other appropriate Federal, State or local organizations, to provide Federal resources to support the provision of health and social services, in underserved neighborhoods especially public housing units. The program will address the barriers of clinic location, transportation, operating hours and other factors that are impediments to timely and appropriate health care utilization, and improved health outcomes for residents of public housing projects.

This program will improve access by awarding grants to community based organizations, especially Community and Migrant Health Centers, to support the provision of case managed, ambulatory primary health and social services in clinics at or in close proximity to public housing, in some cases supported by HUD financing. The program will be established by HHS in cooperation with HUD and other Federal, State and local organizations.

A full range of primary and preventive health and social services will be provided including health care screening, detection, primary care, SSI, WIC, job training and day care.

The community based organizations funded under this program will operate during hours convenient to the residents to facilitate the use of the clinic services, and would undertake other activities to eliminate non-financial barriers to receiving health care services.

Rationale for the Budget Request

The FY 1991 request of $35,000,000 will permit the awarding of grants to community based organizations, especially community health centers. It is estimated that 35-40 projects would be supported providing health and social services to approximately 200,000 residents of HUD supported and other public housing projects.

Health Care Delivery and Assistance

Federal Employee Occupational Health:
Authorizing legislation--P.L. 79-658, (5 USC 7901)

1991 Authorization: Indefinite

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority	---	---	---
(Obligations)	($36,000,000)	($39,000,000)	(+$3,000,000)
FTEs	181	181	---

Purpose of method of operation

The Federal Employee Occupational Health (FEOH) program is authorized by law to evaluate Federal occupational health programs and to advise and assist Federal managers in planning, implementation, monitoring and evaluation of these occupational health programs. FEOH activities impact upon the employees of 98 percent of the major Federal agencies.

The program maximizes Federal employee productivity and reduces Federal financial liability by: (1) developing standards for Federal employee occupational health programs; (2) reviewing Federal agency plans for providing occupational health services prior to their inauguration; (3) providing advice and consultation to Federal managers in the implementation and operation of their occupational health programs; (4) evaluating Federal occupational health programs; and (5) operating occupational health programs, including employee assistance services, for Federal agencies.

Rationale for the Budget Request:

The program has operated as a fully reimbursable enterprise since FY 1986. This request will provide for the continuation of services provided by the FEOH program. Requests for consultation services, funded prior to FY 1986 through the direct appropriation, will be billed to Federal agencies. Emphasis has been placed on using contract personnel to operate the FEOH health units rather than Federal employees. The use of Federal staff is concentrated on overseeing the provision of services by such contractors and to continue expanding occupational health services. The increase of $3 million in reimbursable authority will allow the program to continue present services and respond to additional requests for assistance in high priority areas such as Federal drug testing and AIDS.

Health Care Delivery and Assistance

Federal employee occupational health:

Other information:

	FY 1989 Actual	FY 1990 Current Estimate	FY 1991 Estimate
Number of Management Consultations	6,500	7,500	9,000
Interagency Assistance Agreements - Total	3,291	3,410	3,540
Comprehensive Clinical Services	2,400	2,420	2,450
Special Occupational Health Services	452	500	550
Management Advice and Evaluation	439	490	540
Number of Health Units Operated	168	170	173
Number of Federal Employees Assistance Program Agreements	277	331	397
Percent of Major Federal Agencies Served	98	98	99

Health Professions

Authorizing Legislation--Titles III, VII, and VIII of the Public Health Service Act as amended by the Health Professional Reauthorization Act of 1988, Title VI of P.L. 100-607; the Nursing Shortage Reduction and Education Extension Act of 1988, Title VII of P.L. 100-607; and technical corrections as contained in sections 2603, 2604, 2615 and 2626 of the Anti-Drug Act of 1988, P.L. 100-690.

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Exceptional Financial Need	$6,685,000	$10,000,000	+$3,315,000
Excellence in Minority Health	9,231,000	12,000,000	+2,769,000
HP Institutional Dev.	---	12,000,000	+12,000,000
Health Careers Opportunity Program (HCOP)	21,572,000	25,262,000	+3,690,000
Financial Assistance Disadvantaged Students	5,393,000	6,316,000	+923,000
Community Based Recruitment and Support	---	5,000,000	+5,000,000
Nursing Education Opportunities/	2,571,000 1/	4,000,000	+1,429,000
Subtotal	$45,452,000	$74,578,000	+$29,126,000
Discontinued Programs	$178,651,000	---	-$178,651,000
Transfer from Revolving Funds	-10,000,000	---	+10,000,000
TOTAL	$214,103,000	$74,578,000	-$139,525,000

1/P.L. 100-607 states that not less than 20 percent of funds available for Nurse Special Projects (section 820) be available for Nursing Education Opportunities for individuals from Disadvantaged Backgrounds (Section 827).

Health Professions

Health Professions:

Authorizing Legislation -- Public Health Service Act, Title VII and VIII.

	FY 1990 Appropriation	FY 1991 Estimate	Increase or Decrease
Budget authority:	$178,651,000	---	-$178,651,000
Transfer from Revolving Funds	-10,000,000	---	+10,000,000

The programs of the Bureau of Health Professions are focused on the development of health professions student and institutional assistance; a new Minority Health Initiative which addresses both community and institutional health careers opportunity programs and nursing education opportunities; increased health care quality improvement activities; and the maintenance of financially sound student assistance programs.

After two decades of Federal support, the aggregate shortage of health professionals perceived in the 1960s when these subsidies were initiated has abated. Funds to help students finance their training in the health professions will continue to be available through Medicare medical education payments, health professions scholarships, guaranteed and other student loans and Department of Education grants and loans. Budget authority for categorical activities (e.g., health promotion/disease prevention, primary care, geriatric training and research, special projects, Pacific Basin medical officer training, area health education centers, etc.) is not being requested in FY 1991.

In order to meet mandated deficit reduction goals and budget targets for the FY 1991 health programs, very difficult choices among priorities for Federal funds must be made. To maintain a strong biomedical research program, carry out direct Federal responsibilities to effectively address the AIDS epidemic and the growing drug problem, and implement the new Minority Health Initiative, reductions are necessary in programs which have already largely accomplished stated goals, and where alternative funding sources are available.

The proposal for FY 1991 provides for the discontinuation of most of the programs subsidizing health professions and nursing education activities.

BUREAU OF HEALTH PROFESSIONS
FYs 1986-1990 Funding Levels for
Discontinued Programs in FY 1991
($'s in thousands)

	PHS ACT SECTION	FY 1986 Revised Approp.	FY 1987 Approp.	FY 1988 Approp.	FY 1989 Approp. c/	FY 1990 Revised Approp.
H.P. Institutional Assistance						
Financial Distress......................	788B	$3,924	$3,800	--	--	--
Health Promotion/Disease Prevention:						
P.H. Capitation..........................	770	$4,785	$5,000	$4,787	$4,698	$2,948
P.H. Traineeships........................	792	2,871	3,000	2,872	2,819	2,987
Graduate Prog. in Health Admin...........	791	1,436	1,500	1,436	1,410	1,483
Hlth. Admin. Traineeships................	791A	479	500	479	470	492
Preventive Medicine Residencies..........	788(c)	1,531	1,600	1,532	1,503	1,695
Public Health Special Projects...........	790A	0	0	0	0	834
Allied Health Projects...................	796	0	0	0	0	737
		--------	--------	--------	--------	--------
Subtotal, Health Prom/Disease Prevention		$11,102	$11,600	$11,106	$10,900	$11,176
Primary Care:						
Family Medicine Res. and Trng............	786	$31,868	$33,263	$32,750	$32,142	$32,760
Gen. Dent. Residency and Training........	785	2,584	2,697	2,655	2,606	3,929
Gen. Int. Med. & Pediatrics..............	784	17,704	18,500	17,712	17,383	17,683
Family Medicine Departments..............	780	6,699	7,000	6,702	6,578	6,680
Physician Assistants.....................	788(d)	4,594	4,800	4,596	4,511	4,789
		--------	--------	--------	--------	--------
Subtotal, Primary Care.....................		$63,449	$66,260	$64,415	$63,220	$65,841
Geriatric Training & Research..............	301/789(a,b)	$6,656	$10,000	$12,446	$13,772	$14,047
H.P. Special Projects	788(a,b,e)/301	$1,479	$3,000	$2,873	$2,346	$2,457
Pacific Basin Medical Officers' Trng......	301	$0	$0	$427 b/	$741	$1,638
AHEC/HETC:						
Area Health Education Centers............	781(a-e)	$17,226	$18,000	$17,233	$16,912	$18,125
Health Education & Trianing Centers......	781(f)	0	0	0	0	3,929
		--------	--------	--------	--------	--------
Subtotal, AHEC/HETC........................		$17,226	$18,000	$17,233	$16,912	$22,054
H.P. Analytical Studies/Reports............	708/301	$1,914	$2,000	$1,915	$1,879	$1,846
Rural Hlth Interdisciplinary Training....;	799A	$0	$0	$0	$800 d/	$2,210
		--------	--------	--------	--------	--------
SUBTOTAL, HEALTH PROFESSIONS............		$105,750	$110,860	$110,415	$110,373	$121,269

HRS - 100

BUREAU OF HEALTH PROFESSIONS
FYs 1986-1990 Funding Levels for Discontinued Programs in FY 1991
($'s in thousands)

	PHS ACT SECTION	FY 1986 Revised Approp.	FY 1987 Approp.	FY 1988 Approp.	FY 1989 Approp. c/	FY 1990 Revised Approp.
Nurse Education:						
Advanced Nurse Education................	821	$15,790	$16,750	$16,755	$17,175	$12,771
Nurse Practitioner/Midwife..............	822	11,484	12,000	11,489	11,777	13,432
Nurse Special Projects..................	820	6,672 a/	6,956	6,574	9,578	10,283
Nurse Demonstration Projects............	820	1,292	1,675	2,585	--	--
Nurse Traineeships......................	830(a/c)	11,500 a/	11,750	12,446	12,759	13,501
Nurse Faculty Fellowships...............	830(b)	a/	825	910	1,080	0
Nurse Anesthetists......................	831	766	800	766	784	1,130
Nursing Scholarships	843	0	0	0	--	2,948
SUBTOTAL, NURSE EDUCATION.............		$47,504	$50,756	$51,525	$53,153	$54,065
TOTAL, H.P. & NURSING PROGRAM FUNDS...		$153,254	$161,616	$161,940	$163,726	$175,334
AD HOC Hospitals.........................	608/704/705	$0	$0	$0	$1,360 g/	$1,343
National Practitioners (HCQI) Data Bank...	PL 99-660	$0	$0	$0	$2,766	$1,974
GRAND TOTAL.............................		$153,254	$161,616	$161,940	$167,852	$178,651

a/ Reflects a reprogramming of $526,000 from the Nurse Faculty Fellowship program to the Nursc Traineeship program (+495,000) and the Nurse Special Projects Grants and Contracts program (+31,000).

b/ Reflects a reprogramming of $750,000.

c/ Revised to implement the H.P. Reauthorization Act of 1988 (P.L. 100-607).

d/ Dire Emergency Supplemental Appropriations and Transfers..., 1989, P.L. 101-45.

e/ Technical corrections as contained in P.L. 100-690 Anti-Drug Abuse Act of 1988 makes these projects "setasides" from annual appropriations for Titles VII & VIII of the PHS Act.

Health Professions

Discontinued Project Outputs in FY 1991

	PHS Act Section	FY 1989 Approp.	FY 1990 Revised Approp.
Health Promotion/Disease Prevention:			
P.H. Capitation	770		
Program Amount		$4,698,000	$2,948,000
No. of P.H. Schools		24	24
Estimated Enrollment Benefitted		8,542	8,698
Average Amount per Student		$554	$339
P.H. Traineeships	792		
Program Amount		$2,819,000	$2,987,000
No. of P.H. Schools		24	24
No. of Students Supported		1,361	1,436
Average Amount per Trainee		$2,085	$2,070
Graduate Prog. in Health Admin	791		
Program Amount		$1,410,000	$1,483,000
No. of Awards		33	35
No. of Students Benefitted		3,015	3,119
Health Administration Traineeships	791A		
Program Amount		$470,000	$492,000
No. of Awards		34	35
No. of Trainees Supported		338	380
Average Amount per Trainee		1,380	1,295
Preventive Medicine Residencies	788(c)		
Program Amount		$1,503,000	$1,695,000
No. of Residency Projects/Programs		11	11
No. of Residents Benefitting		112	95
Public Health Special Projects	790A		
Program Amount		0	$834,000
No. of Awards		0	5-6
Allied Health Projects	796		
Program Amount		0	$737,000
No. of Projects		0	7-10
Primary Care:			
Family Medicine Res. and Trng	786		
Program Amount		$32,142,000	$32,760,000
Projects Supported		303	311

Health Professions

Discontinued Project Outputs in FY 1991

	PHS Act Section	FY 1989 Approp.	FY 1990 Revised Approp.
GRADUATE			
Program Amount		$18,942,000	$18,260,000
No. of Projects		191	195
No. of First-Year Intern/Resid. Positions Assisted		2,428	2,479
No. of Total Residency Positions Supported		7,392	7,392
PREDOCTORAL			
Program Amount		$7,300,000	$8,500,000
No. of Projects		73	78
No. of Trainees Benefitted		20,009	21,379
FACULTY DEVELOPMENT			
Program Amount		$5,900,000	$6,000,000
No. of Projects		39	38
No. of Faculty Trained		2,177	2,121
Gen. Dent. Residency and Training	785		
Program Amount		$2,606,000	$3,929,000
No. of Projects		27	34
No. of Residents Benefitted		142	182
Gen. Int. Med. & Pediatrics	784		
Program Amount		$17,383,000	$17,683,000
Projects Supported		103	106
GRADUATE			
Program Amount		$13,984,000	$14,083,000
No. of Projects		80	80
No. of First-Year Intern/Resid. Positions Assisted		614	625
No. of Total Residency Positions Supported		1,722	1,760
FACULTY DEVELOPMENT			
Program Amount		$3,400,000	$3,600,000
No. of Projects		23	26
No. of Faculty Trained		1,230	1,390

Health Professions

Discontinued Project Outputs in FY 1991

	PHS Act Section	FY 1989 Approp.	FY 1990 Revised Approp.
Family Medicine Departments.............	780		
Program Amount.........................		$6,578,000	$6,680,000
Total Projects.........................		54	42
No. of New Projects..................		(33)	(5)
No. of Continuation Projects.........		(21)	(37)
No. of Individuals Participating in Supporting Programs.................		22,813	19,400
Physician Assistants....................	788(d)		
Program Amount.........................		$4,511,000	$4,789,000
No. of Grant Awards....................		37	40
No. of PA Trainees.....................		1,991	2,152
Geriatric Projects:			
Geriatric Education Centers (301).......	789(a)		
Program Amount.........................		$9,847,000	$9,823,000
No. of Awards..........................		38	36
Geriatric Faculty Fellowships...........	789(b)		
Program Amount.........................		$3,925,000	$4,224,000
No. of Awards..........................		23	23
No. of Physician Fellows..............		37	85
No. of Dental Fellows.................		27	50
H.P. Special Projects (301):			
Program Amount.........................	788(a,b,e)	$2,349,000	$2,457,000
No. of Awards..........................		18	21
Pacific Basin Medical Officers Trng.......	301		
Program Amount...........................		$741,000	$1,638,000
No. of Projects..........................		1	1
No. of New Trainees......................		31	0
Total Trainees Supported.................		100	100
AHEC/HETC:			
Area Health Education Centers...........	781(a-e)		
Program Amount.................		$16,912,000	$18,125,000
No. of Projects........................		17	17
No. of Special Initiatives............		16	16
Health Education & Training Centers.....	781(f)		
Program Amount.........................		$0	$3,929,000
Border HETC............................		0	6
Non-Border HETC........................		0	6

Discontinued Project Outputs in FY 1991

	PHS Act Section	FY 1989 Approp.	FY 1990 Revised Approp.
H.P. Analytical Studies/Reports	708/301		
Program Amount		$1,879,000	$1,846,000
No. of Projects		19	19
Rural Hlth Interdisciplinary Training	799A		
Program Amount		$900,000	$2,210,000
No. of Projects		1	6
Nursing:			
Advanced Nurse Education	821		
Program Amount		$17,175,000	$12,771,000
No. of Projects		100	66
No. of Students Enrolled		2,000	2,000
Nurse Practitioner/Midwife	822		
Program Amount		$11,777,000	$13,432,000
No. of Projects		55	63
Nurse Special Projects a/	820		
Program Amount		$11,972,000	$12,854,000
Total No. of Projects		96	104
No. of New Projects		(23)	(61)
No. of Continuation Projects		(73)	(43)
Nurse Traineeships	830(a/c)		
Program Amount		$12,759,000	$13,501,000
No. of Institutions		192	195
No. of Trainees Supported		4,500	5,000
Average Amount per Trainee		$2,815	$2,700
Nurse Faculty Fellowships	830(b)		
Program Amount		$1,080,000	$0
No. of Awards		50	0
No. of Faculty Assisted		72	0
Average per Fellowship		$6,309	$0
Nurse Anesthetists	831		
Program Amount		$784,000	$1,130,000
No. of Awards		58	58
No. of Trainees Supported		524	524
Average per Trainee		$1,495	$2,156

Health Professions

Discontinued Project Outputs in FY 1991

	PHS Act Section	FY 1989 Approp.	FY 1990 Revised Approp.
Nursing Scholarships	843		
Program Amount		$1,600,000 c/	$2,948,000
No. of Scholarships		404	725
Average per Scholarship		3,961	4,000
AD HOC Hospitals	608/704/705		
Program Amount		$1,360,000	$1,343,000
No. of Awards		4	4
National Practitioners (NCQI) Data Bank	PL 99-660		
Program Amount		$2,766,000	$1,974,000
Volume of Inquiries		d/	250,000

a/ Includes Subpart II- Nursing Education Opportunities for Individuals from Disadvantaged backgrounds.

b/ Included in Nursing Special Projects.

c/ P.L. 100-607 states that unused Nursing Student Loan funds returned shall be shall be available without fiscal year limitation for Section 843 (Nursing Sc including $1,633,201 from FY 1987.

d/ No inquiries were made in FY 1989.

Exceptional Financial Need:

Authorizing legislation -- Section 758 of the Public Health Service Act.

1991 Authorization: $30,000,000

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	$6,685,000	$10,000,000	+$3,315,000

Purpose and Method of Operations

The Exceptional Financial Need Scholarships program assists persons with limited resources to attend one of the health professions schools (medicine, osteopathy, dentistry, veterinary medicine, optometry, podiatry, and pharmacy) as full-time students. Funds are allocated to participating health professions schools which in turn are responsible for selecting the students to receive the scholarships. Priority is given to schools of allopathic and osteopathic medicine and dentistry. Recipients may receive monthly stipends for living expenses, plus tuition and other reasonable education expenses, without incurring a service obligation.

Funding levels for the past five fiscal years were as follows:

1986	$6,699,000
1987	7,000,000
1988	6,702,000
1989	6,578,000
1990	6,685,000

Rationale for the Budget Request

The FY 1991 request of $10,000,000 will provide scholarships to approximately 3,334 students. This level of funding will provide scholarships to approximately 1,116 more students than the FY 1990 Budget.

Health Professions

Excellence in Minority Health:

Authorizing legislation -- Section 782 of the Public Health Service Act

1991 Authorization: Such sums as necessary.

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	$9,231,000	$12,000,000	+$2,769,000

Purpose and Method of Operations

The Excellence in Minority Health Education program addresses the disparities in the health status of minorities and their under representation in the health professions. Specifically, it is intended to strengthen the national capacity to train minority students; to support the health professions schools which have trained a significant number of the Nation's minority health professionals; and to enable those schools to supply health professionals to serve minority populations in underserved areas. Grants will be awarded to eligible health professions schools for: developing plans to achieve institutional improvements, including financial independence; improving capacities to recruit and retain faculty; student recruitment; improving student performance; improving access to information resources; and developing curricula and faculty in order that the school might become a resource with respect to the health problems of minority communities, such as higher infant mortality rates and higher incidence of acquired immunodeficiency syndrome.

This program serves as the principle Federal activity supporting certain predominantly minority institutions which train a disproportionate number of minority health professionals as well as provide a great deal of care to minority populations. These schools are recognized for their special capacity to conduct activities to prepare health professionals to serve minority populations. In FY 1987 the program focused on 4 health professions schools that received support through the Advanced Financial Distress Program (Section 788B). In FY 1988 and 1989 appropriations language expanded this eligibility to include any health professions school which has majority enrollment of minority students.

In FY 1988, five schools were awarded grants. Four of these received continuation funds in FY 1989. In FY 1990, 4 schools will receive awards.

Excellence in Minority Health:

Funding levels for the past five fiscal years were as follows:

1986	---
1987	---
1988	$9,574,000
1989	9,396,000
1990	9,231,000

Rationale for the Budget Request

The FY 1991 request of $12,000,000 will provide grants to 4 schools for projects which include:

- Planning to achieve institutional improvements, including financial independence, to enable the school to support programs of excellence in health professions education for minority individuals.
- Improving the capacity of the school to recruit and retain faculty.
- Providing improved access to the library and information resources of the school.
- Establishing, strengthening, or expanding programs to enhance the academic performance of students in the school.
- Establishing, strengthening, or expanding programs to increase the number and quality of applications for admission to the school.
- Development of curricula and carrying out faculty training programs of minority providers, with respect to the health problems of minority communities such as higher infant mortality rates and higher incidence of acquired immunodeficiency syndrome.

H.P. Institutional Development:

Authorizing Legislation--Title VII of the PHS Act, plus pending legislation.

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	---	$12,000,000	+$12,000,000

Purpose and Method of Operations

This new Institutional Development program would assist schools, with a majority of minority students, to develop improved faculty training and to provide limited funding flexibility for institutional improvement without risking further erosion of their financial status. Health professions schools in institutions whose student bodies historically have a majority of minority students find their resources very seriously strained by or inadequate to meet the high costs of top quality health professions training. The problem of small endowments is exacerbated by the schools' desire to maintain tuition at levels lower than the national average to assist in accommodating the severely limited financial resources of their students. Consequently, these schools often lag behind others in availability of current technology, employ faculty with relatively limited post-doctoral training, and find it difficult to develop or sustain competitive curricula.

Faculty Development Component

The Faculty Development Component will provide grants to health professional schools where enrollment historically consists of a majority of minority students, to support faculty and general institutional development.

H.P. institutional assistance:

This program component, through provision of professional education enhancement resources, will support a two-phased faculty development activity. Through it, faculty of eligible health professions schools will be supported for a period of up to three years within the sponsoring school or another institution for post-doctoral training in relevant areas of science and pedagogy. Following completion of an approved training plan, a supplemental research award of up to $50,000 per year will be provided to faculty-trainees for up to two years to conduct relevant research at the sponsoring school. Priority will be given to areas in which sponsors report special needs, are of particular relevance to the disadvantaged population, or are specialties in which the disadvantaged are particularly underrepresented.

Health Professions

H.P. Institutional Development:

Academic Reinforcement/Institutional Improvement Component

This component is intended to assist eligible schools in maintaining tuition levels reflecting the financial capacities of their students. The component is a formula based capitation program based on the number of full-time students in specified disciplines. Under this formula, eligible schools would be candidates for awards of up to $1,250 per full-time enrolled student. Schools of pharmacy, nursing, and health administration in eligible institutions would be eligible for awards of up to $750 per full-time enrolled student on the following basis: pharmacy, years 3, 4, and 5 of a five year curriculum; nursing, years 3 and 4 of a four year curriculum; and health administration, 2 years toward the masters or doctorate degree.

Rationale for the Budget Request

The FY 1991 request will provide $12,000,000 for both components of the Institutional Development program.

The request for the Faculty Development Component will provide $2.4 million in support to institutions meeting the criteria for selection, i.e., minority health profession schools.

The request for the Academic Reinforcement/Institutional Improvement Component will provide $9.6 million in support for approximately 10,250 students determined by a formula based capitation award.

H.P. institutional assistance:

Outputs	1990	1991
Schools qualifying for $1,250/FTE 1/ students:	0	12
Students counted toward formula at $1,250/FTE students:	0	3,800
Schools qualifying for $750/FTE students:	0	55
Students counted toward formula at $750/FTE students:	0	6,450

1/ Full-time enrolled

Disadvantaged Assistance:

Authorizing Legislation -- Section 787 of the Public Health Service Act.

1991 Authorization: $36,000,000

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:			
Health Career Opportunity Program:	$21,572,000	$25,262,000	$+3,690,000
Financial Assistance for Disadvantaged Students: -	5,393,000	6,316,000	+923,000
Total	$26,965,000	$31,578,000	$4,613,000

Purpose and Method of Operations

The Disadvantaged Assistance program's long-range goal is to promote a nationally equitable health delivery system by increasing the access to health careers and services for individuals from disadvantaged backgrounds. The specific objective of the program is to provide a national focal point to assure that the health resources required to meet the health care needs of disadvantaged Americans are comprehensively addressed. The program increases the number of individuals from disadvantaged backgrounds entering into and successfully completing a health professions or allied health education. This program also addresses the imbalance of minority health professionals and helps correct the disparity of health care services available to minority communities.

Health Careers Opportunity Program (HCOP)

One mechanism for achieving the long-range goal is the award of grants and contracts to health professions schools and other health or educational entities to assist individuals from disadvantaged backgrounds to undertake and complete education in health professions, public health and allied health professions. Another mechanism is funding of projects designed to identify, motivate, recruit and provide preliminary and enrichment education to disadvantaged individuals in order to facilitate their entry into and graduation from such schools.

The HCOP program serves as the principal Federal health training activity for underrepresented minorities and other students who are financially or otherwise disadvantaged. Operationally, the program focuses on educational

Disadvantaged Assistance:

institutions by requiring that 70 percent of the funds be awarded to institutions of higher education, 10 percent be obligated to community based programs, and not more than 5 percent of such funds may be awarded for projects whose primary purpose is informing individuals about the existence and general nature of health careers. From 1972 through 1987, approximately 68,525 trainees formally participated in structured programs designed to provide them the skills, educational background, or enrichment help necessary to facilitate their entry into and/or retention in health professions schools. Thousands of others benefitted from general counseling, motivation, tutorial and recruitment efforts, and were provided special aid and other information concerning health careers. Studies show that students from HCOP-supported undergraduate schools have higher admission rates to medical schools than students from non-HCOP undergraduate schools when grade point averages and Medical College Admissions Test scores are equivalent. The studies also show that the graduation rate for minority students in medical schools with HCOP retention programs is higher than for like students in medical schools not having HCOP retention programs.

Authorizing legislation directs that, of the total funds appropriated for Disadvantaged Assistance, 20 percent shall be made available for stipend support for financial assistance for disadvantaged health professions students who are enrolled in a school of medicine, osteopathy, or dentistry.

Stipends up to $10,000 per student per year may be made available for financial assistance to disadvantaged health professions students enrolled in an eligible school of medicine, osteopathy, or dentistry. There is no obligatory service pay-back provision for students receiving these stipends. Recipients must meet part (a) of the Disadvantaged Background Definition cited in 42 CFR Part 57 of Section 787, and the Exceptional Financial Need (EFN) eligibility criteria contained in Section 758 of the PHS Act. Eligible institutions must be a school of medicine, osteopathy, or dentistry enrolling disadvantaged students of exceptional financial need.

Funding levels for the past five fiscal years were as follows:

1986	$24,403,000
1987	27,250,000
1988	27,406,000
1989	26,897,000
1990	26,965,000

Disadvantaged Assistance:

Rationale for the Budget Request

The FY 1991 request emphasizes programs targeted at ensuring equitable opportunities for minority/disadvantaged students to pursue health professions and addressing minority health issues.

The total request of $31,578,000 includes support at a level of $25,262,000 for approximately 177 HCOP projects designed to increase the number of individuals from disadvantaged background entering into and completing a health or allied health professions education. It is estimated that 24,000 individuals would be directly assisted by the program. Emphasis would be placed on supporting programs demonstrating strong track records in accessing disadvantaged students into or enrolling them in health or allied health professions schools, and in innovative approaches such as post baccalaureate programs designed to maximize disadvantaged enrollments and graduation from such schools. This level also includes $6,316,000 for financial assistance to approximately 2,270 disadvantaged health professions students.

Health Professions

Community Based Recruitment and Support:

Authorizing Legislation -- Title III of the PHS Act, plus pending legislation

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	---	$5,000,000	+$5,000,000

Purpose and Method of Operation

The Community Based Recruitment and Support program provides grants to support innovative community-based efforts to recruit potential health professions students from the community and support their health professions training.

Minority and disadvantaged students continue to be underrepresented in the health professions. While there are several Federal programs that provide assistance to disadvantaged students, they tend to focus directly on health professions students who apply for loans or scholarships, or on health professions schools which seek to improve their capacity to train minority health professionals. Many young individuals with the potential to be successful health professionals may be deterred from even considering such career goals by the large financial obstacles they face and a lack of understanding about the choices and opportunities that are available. Community-based organizations and institutions are in a good position to recognize and identify young people with the potential to become health professions students, and offer them the kind of information, encouragement, and support that they need to enter this career path. In turn, the communities can benefit from reciprocal services provided by these individuals after they have become health professionals.

This grant program will provide financial assistance to community organizations and institutions to support innovative projects to recruit health professions students from the community, support their health professions education, and establish an obligation for service as a health professional in the local community. The length and nature of the service obligation would not be specified by the program, but would be one aspect of the grant proposal. Also, up to 25 percent of matching funds would be required. In addition to providing financial assistance, the Department would provide technical assistance in establishing contracts between the communities and the health professions students regarding the service obligation.

Given the central purpose of identifying and nurturing individuals who might not otherwise choose to enter health professions training, the program will be limited to proposals to recruit undergraduate students who have not yet entered health professions schools.

Community based recruitment and support:

Grantees would identify local students at the undergraduate level with potential to be accepted by schools of medicine or osteopathy. This would involve a credential review, student interview and contract development. All student applications would be evaluated by a local advisory board which would include, but not be limited to, representatives from city government, hospital boards, educational institutions, churches, civic organizations, local medical societies, and other relevant community groups. Project budgets would include, but not be limited to, personnel costs for staff, publicity expenses, and student costs such as tuition, fees and stipend.

Rationale for the Budget Request

The request of $5,000,000 for the new Community Based Recruitment and Support program includes support for:

	FY 1990	FY 1991
Number of projects	---	38
Number of students benefitting	---	250

Nursing Education Opportunities:

Authorizing Legislation -- Section 827 of the Public Health Service Act.

1991 Authorization: $5,000,000

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	$2,571,000[1]	$4,000,000	+$1,429,000

Proposed and Method of Operations

The objective of this program is to increase nursing opportunities for individuals from disadvantaged backgrounds by identifying, recruiting and selecting such individuals; facilitating their entry into schools of nursing; providing counseling or other services designed to assist such individuals in completing their nursing education; providing, prior to entry into a school of nursing, preliminary education designed to assist them to successfully complete a regular course of nursing education; and paying such stipends and publicizing financial aid available to persons enrolled in schools of nursing. This program is responsive to one of the recommendations of the Secretary's Commission on Nursing.

Funding levels for the past five fiscal years were as follows:

1986	2,451,000
1987	2,544,000
1988	2,521,000
1989	2,394,000
1990	2,571,000 [1]

Rationale for the Budget Request

The FY 1991 request of $4,000,000 will support 27 grants at an average cost of $150,000 per grant. In FY 1990 funding for this activity was included in the Nursing Special Projects.

[1] P.L. 100-607 states that not less than 20 percent of funds available for Nursing Educational Opportunities for individuals from Disadvantaged Backgrounds (Section 827).

Health Professions Student Loans:

Authorizing Legislation--Public Health Service Act, Title VII, Sections 741 - 747.

1990 Authorization: Authority to continue circulation of student loan revolving funds in health professions schools expires December 31, 1991.

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority:	---	---	---
(Obligations) 1/	($62,000,000)	($62,000,000)	

1/ Funds from prior appropriations.

Purpose and Method of Operations

The Health Professions Student Loan (HPSL) program authorizes long-term (ten year), 5 percent interest loans of up to $2,500 per year, plus tuition, to medical, osteopathy, dental, veterinary medicine, optometry, podiatry, and pharmacy students. Borrowers can defer payment of health professions loans pending completion of advanced professional training, and for service in the Uniformed Services or Peace Corps. The last direct appropriation for this program was in FY 1983. Since then new loans have been made by participating programs with funds acquired from repaid student loans which have been maintained in school revolving funds.

A provision effective in FY 1986 provides that excess funds which are returned to the Secretary in any fiscal year shall be redistributed in such fiscal year and in the succeeding fiscal year to the eligible schools who request funds. Eligible schools are those which established a health professions student loan fund between July 1, 1972 and September 30, 1985. The redistributed funds are allocated by statutory formula to the eligible schools.

For the past five fiscal years the redistributed funds are as follows:

1986............................	---
1987............................	$3,302,115
1988............................	4,294,125
1989............................	---
1990............................	---

Health Professions

Health Professions Student Loans:

Rational for the Budget Request

From 1965 through 1989 approximately $963 million, supporting an estimated 270,000 borrowers, has been awarded from direct appropriation, loan revolving funds, and redistributed funds. A substantial portion of these loan funds are being repaid to the schools by former borrowers and are being placed in therevolving fund for new loans to students.

In FY 1991 it is estimated that approximately 20,666 loans totalling $62 million will be made to students from available revolving funds. In addition, health professions students may seek financial assistance from the HEAL program, the Guaranteed Student Loan Program of the Department of Education, and other Federal, State and private loan funds.

	1989	1990 Appropriation	1991 Estimate
Amount Available at Schools from Revolving Funds 1/	$69,600,000	$62,000,000	$62,000,000
Number of Students Assisted	23,200	20,666	20,666
Funds Returned to Federal Government from Revolving Funds:			
Amount Returned (prior year carryover)	$1,082,000	$5,175,000	$3,000,000
Amount Returned	5,175,000	3,000,000	2,500,000
Amount Available for Redistribution	6,257,000	8,175,000	5,500,000
Amount Transferred to Titles VII & VIII	1,082,000	5,175,000	---
Amount Transferred to Student Loan Insurance Fund	---	---	-4,250,000
Amount Redistributed	---	---	---
Amount Available, End of Year	5,175,000	3,000,000	1,250,000

1/ From prior appropriations.

Nursing Student Loans:

Authorizing Legislation--Public Health Service Act, Title VIII, Sections 836 - 839.

1991 Authorization: Authority to continue circulation of student loan revolving funds in nursing schools expires September 30, 1994.

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	---	---	---
(Obligations)	($16,000,000)1/	($13,000,000)1/	(-$3,000,000)

1/ Funds from prior appropriations.

Purpose and Method of Operations

The Nursing Student Loan program authorizes long-term (10 years), 5 percent interest loans of $2,500-$4,000 per academic year or an aggregate of $13,000 to assist nursing students undertaking a course of study leading to a diploma, associate degree, bachelor's degree, or graduate degree in nursing. Borrowers can defer payment for specified time periods pending completion of study leading to a baccalaureate or graduate degree in nursing or advanced training or for preparation as a nurse anesthetist, and for services in the Uniformed Services or Peace Corps. The last appropriation for this program was in FY 1983. Since then new loans have been made by participating programs with funds acquired from repaid student loans which have been maintained in school revolving funds.

A provision, effective in FY 1986, provides that excess funds which are returned to the Secretary in any fiscal year shall be redistributed in that fiscal year and the succeeding fiscal year to eligible schools who request funds. Priority for funding is given to nursing schools that established loan programs after September 30, 1975. The redistributed funds are allocated by statutory formula to the eligible schools.

For the past five fiscal years the redistributed funds are as follows:

1986............................	---
1987............................	$10,251,978
1988............................	5,879,516
1989............................	8,194,143
1990............................	---

Rationale for the Budget Request

From 1965 through 1989 approximately $395 million, supporting an estimated 321,000 borrowers, has been awarded from appropriations, loan revolving funds,

Nursing student loans:

and redistributed funds. A substantial portion of these loan funds are now being repaid to the schools by previous student borrowers and are being placed in the revolving funds for new loans to students.

In FY 1991, it is estimated that approximately 6,500 loans totalling $13 million will be made to nursing students from revolving funds and a portion of the redistributed funds. In addition, the Guaranteed Student Loan Program of the Department of Education and other Federal, State and private loans are other available sources of financial support for nursing students.

	1989	1990 Estimate	1991 Estimate
Amount available at schools from Revolving Funds	$24,100,000 1/	$16,000,000 1/	$13,000,000
Number of students assisted	12,050	8,000	6,500
Funds Returned to Federal Government from Revolving Fund:			
Amount returned (prior year balance)	$12,188,000	$5,257,857	$7,500,000
Amount returned	10,062,000	7,500,000	5,500,000
Transferred to Titles VII & VIII	-8,798,000	-4,825,000	---
Transferred to SLIF	---	---	-10,750,000
Subtotal	$13,452,000	$7,932,857	$2,250,000
Amount redistributed	-8,194,143	---	---
Nursing Scholarships1/	---	-432,857	---
Amount available, end of year	$5,257,857	$7,500,000	$2,250,000

1/ P.L. 100-607 provides that NSL funds returned to the

Secretary and not reallocated to NSL schools during the two-year period of fund availability will be available to carry out Section 843 and shall remain available until expended.

National practitioner data bank:

Authorizing legislation--Title IV of P.L. 99-660, the "Health Care Quality Improvement Act of 1986," as amended by P.L. 100-177; and Section V, of P.L. 100-93, the "Medicare and Medicaid Patient and Program Protection Act of 1987.

	FY 1989 Current Estimate	FY 1990 Estimate	Increase or Decrease
Budget authority:	$1,974,000	---	-$1,974,000

Purpose and Method of Operations

The Health Care Quality Improvement Act of 1986 requires the Secretary of Health and Human Services to establish a national system (data bank) for the receipt, storage and dissemination of information on paid medical malpractice judgments and settlements, sanctions taken by Boards of Medical Examiners, losses of membership in professional societies, and certain professional review actions taken by health care entities. Insurance companies, State licensure boards and authorities, and other health care entities and professional societies are required to report information to the data bank not less than monthly. The coverage of the data bank includes dentists and physicians; and with respect to malpractice settlements and judgments, other categories of licensed health professionals.

In addition, the Act requires the monitoring and reporting to the Secretary of entities which do not comply with required reporting to the data bank and investigations to determine the reasons for noncompliance. The Act also requires annual reports to Congress and coordination, through Memoranda of Understanding, between DHHS and the Department of Defense, the Veterans Administration, and the Drug Enforcement Administration of the Department of Justice on implementation of the Act.

Amendments made to the Health Care Quality Improvement Act of 1986 by P.L. 100-177 provide for the collection of user fees to cover the costs of processing requests and providing such information to users of the data bank and provide relief to the data bank operator from any civil actions with respect to information provided under the law.

National practitioner data bank:

Rationale for the Budget Request

No funds are requested in FY 1991. Proposed appropriations language would authorize user fees to cover the full cost of operating the Data Bank and would authorize the fees collected to remain available until expended. During FY 1991, we estimate that approximately 1,000,000 inquiries would be made of the Data Bank. No estimate of the amount of the user fee under the proposed appropriations language can be made at this time due to lack of operational experience (i.e. the propcsed opening of the Data Bank is scheduled in the third quarter of FY 1990). Operational costs include: (1) printing of Data Bank forms and instructions; (2) implementing a system to impose civil money penalties regarding failure to report malpractice payments to the Data Bank and to impose civil money penalties regarding violating the confidentiality of Data Bank information (a responsibility of the Office of the Inspector General); (3) implementing a system to impose sanctions against state licensing boards and health care entities that fail to report required information to the Data Bank; (4) implementing a system to resolve disputes of the accuracy of Data Bank information; (5) staff travel associated with the Data Bank educational program; and (6) preparation of required reports to Congress.

FY 1991 Estimated Inquiries to the Data Bank

Users	Volume of Inquiries
Hospitals	960,000
Other health care entities	5,000
State licensing boards	30,000
Other eligible entities and individuals	5,000
Total	1,000,000

Maternal and Child Health and Resources Development

Authorizing Legislation - Titles III, VII, XVI, XIX of the Public Health Service Act and Title V of the Social Security Act.

	1990 Current Estimate	1991 Estimate	Increase or Decrease
Maternal and Child Health Block	$553,627,000	$578,627,000	+$25,000,000
Pediatrics EMS	$3,947,000	---	-$3,947,000
Health Teaching Facilities	$488,000	$488,000	---
Organ Procurement and Transplantation	$3,948,000	$3,257,000	-$691,000
Total Budget Authority	$562,010,000	$582,372,000	+$20,362,000

Maternal and Child Health and Resources Development

Maternal and Child Health Block Grant

Authorizing legislation--Title V of the Social Security Act and proposed legislation.

1991 Authorization: $686,000,000

	1990 Current Estimate	1991 Estimate	Increase or Decrease
Total Budget Authority	$553,627,000	$578,627,000	+$25,000,000
MCH Block Grant to States	(470,582,950)	(470,582,950)	---
SPRANS	(83,044,050)	(83,044,050)	---
Project Grants (One Stop Shopping)	(---)	(25,000,000)	+(25,000,000)

Purpose and Method of Operation

The Maternal and Child Health (MCH) Block Grant Program provides funds to each State and insular area to meet a broad range of health services, including preventive and primary care services for children and services for children with special health care needs. States must also establish and maintain a toll-free "hot-line" for parents providing information about Title V, Medicaid and other health care providers. Block grant funds to States are allocated on a pro-rata (percentage) method based on FY 1981 levels of funding for MCH-related programs which were combined into the MCH block grant when the present MCH Services Block Grant Program was initiated in FY 1982. Beginning in FY 1991, States must earmark at least 30 percent of their federal allotment for preventive and primary care services for children and at least 30 percent for services for children with special health care needs. Also starting in fiscal year 1991 States may use no more than 10 percent of their federal allotment for administrative costs.

Additionally, 15 percent of the amount appropriated, up to $600 million, is set aside for special projects of regional and national significance (SPRANS) in the categories of research, training, genetic diseases and newborn genetic screening, hemophilia and maternal and child health improvement especially infant mortality. Whenever the total appropriation exceeds $600 million, 12.75 percent of the amount over $600 million is used to fund 6 additional categories of projects including home visitation; increased participation of obstetricians and pediatricians under both the block grant and Medicaid; integrated MCH service delivery systems; MCH centers for pregnant women and infants; MCH services to rural populations; and outpatient and community based services for children with special health care needs. After taking the 12.75

Maternal and Child Health Block Grant:

percent set aside the remaining 87.25 percent is distributed on the same 85/15 percent split as in the basic block grant formula.

Funding levels for the past five fiscal years were as follows:

1986	$457,446,000
1987	$496,750,000
1988	$526,571,000
1989	$554,268,000
1990	$553,627,000

Rationale for the Budget Request

The FY 1991 MCH block grant request of $578,627,000, provides for the same level for State Block grants, $470,582,950, and the SPRANS set aside, $83,044,000, as the FY 1990 Current Estimate. An estimated total of 445 SPRANS projects will be funded in FY 1991. In addition, $25,000,000 will support a special grant initiative targeted at improving the delivery of health care services for pregnant women and infants.

The special grant initiative, "one-stop shopping", would provide $25,000,000 to aid States and community based organizations to further enhance access to prenatal and postnatal care and related services. Specifically these projects would restructure and reorganize the application and health services delivery process related to delivery of quality health care for pregnant women and infants. Preference for these projects would be given to States and communities with above average infant mortality rates and substantial minority health disparities. Community based organizations and States will be required to assess and reduce problems, enhance their systems of health services and access to care, and expand the knowledge base to determine the effectiveness of health care interventions. Grants will be awarded to those States or organizations which can demonstrate adequate plans to alleviate infant mortality problems and provide better access to health care. An estimated 75-100 grants are anticipated. The proposed appropriation language would allow for the implementation of this initiative notwithstanding current Title V formula/funding allotments.

Maternal and Child Health and Resources Development

Maternal and Child Health Block Grants:

Estimated Funding for the 15% Set-Aside

(dollars in millions)

	1990		1991	
	Amt.	Projects	Amt.	Projects
Research	$ 5.9	41	$5.9	41
Training	$32.3	131	$32.3	131
Hemophilia	$4.7	25	$4.7	25
Genetics	$7.9	51	$7.9	51
MCHIP	$32.2	197	$32.2	197
Total Set-Aside	$83.0	445	$83.0	445

Emergency Medical Services for Children:

Authorizing legislation--Section 1910 of the Public Health Service Act.

1991 Authorization: $5,000,000

	1990 Current Estimate	1991 Estimate	Increase or Decrease
Budget authority:	$3,947,000	---	-$3,947,000

Purpose and Method of Operation

The Emergency Medical Services for Children (EMSC) demonstration program was created to enhance and expand delivery of emergency medical services (EMS) for acutely ill and seriously injured children and recognized that the needs of such children tend to be different from those of adults and are often not being met by the current EMS systems either during the pre-hospital or in-hospital phases.

The goal of the EMSC program has been the reduction of child and youth mortality and morbidity sustained as a result of severe acute illness or trauma. The EMSC program provided support to projects which demonstrate the effectiveness of a systems approach to pre-hospital emergency care including prompt appropriate on-site assessment and treatment of the child's problem together with rapid, safe transport to a medical facility having the resources to continue the proper care.

Funding levels for the past five fiscal years were as follows:

1986	$2,000,000
1987	$2,000,000
1988	$1,915,000
1989	$2,964,000
1990	$3,947,000

Rationale for the Budget Request

The Administration has not requested funding for this program in FY 1991. The overall goals of this program can be accomplished through childhood injury and prevention projects currently funded by the MCH block grant set-aside. From FY 1985 through FY 1989 a total of $8,879,000 was available to support 14 demonstration projects awarded to State governments or health organizations working with State health agencies.

Health Teaching Facilities:

Authorizing legislation--Section 726 of the Public Health Service Act.

1991 Authorization: Indefinite

	1990 Current Estimate	1991 Estimate	Increase or Decrease
Budget authority:	$488,000	$488,000	---
Carryover	35,378	18,058	

Purpose and Method of Operation

This program continues to support the loan guarantees and interest subsidy payments for construction of health professions teaching facilities. The interest subsidy may not exceed the rate of 3 percent, and is paid to the lending institutions.

Funding levels for the past five fiscal years were as follows:

1986	$1,148,000
1987	$ 0
1988	$ 96,000
1989	$ 494,000
1990	$ 488,000

Rationale for the Budget Request

In FY 1991, an appropriation of $488,000 is requested. Payments in FY 1989 and FY 1990 included carry-over monies from prior fiscal years. Payment of interest subsidies is a continuing commitment of the Federal government until the year 2004, the last maturity date for these 30 year loans.

	FY 1990	FY 1991
Interest Subsidies Amount...	$505,320	$480,751
Number of Lenders Receiving Interest Subsidies........	3	3
Number of Schools Receiving Benefits under the Loan Guarantee Provision.......	3	3

Maternal and Child Health and Resources Development

Organ Transplantation:

Authorizing legislation--Sections 371-375 of the Public Health Service Act.

1991 Authorization: Indefinite

	1990 Current Estimate	1991 Estimate	Increase or Decrease
Budget authority:	$3,948,000	$3,257,000	-$691,000

Purpose and Method of Operation

Funding, through a Federal contract, of the National Organ Procurement and Transplantation Network (OPTN) has improved the procurement and allocation of organs on a nation-wide basis. The OPTN maintains a 24-hour telephone service to aid in matching donor organs with potential organ recipients and to coordinate placement efforts with transplant centers. All transplant centers and organ procurement teams now operate under the same general policies regarding organ sharing and distribution.

The Scientific Registry of Transplant Recipients, also established under a federal contract, provides data for research and policy making on outcomes of organ transplants including medical and other factors which affect outcomes.

Under a program begun in FY 1986, grants were made to Organ Procurement Organizations (OPOs) to help improve the effectiveness of the organ procurement system in the nation. These grants have been used to encourage the consolidation and the expansion of existing programs. Grants to OPOs have also been used to provide information and education to health professionals and the public to increase the donation and availability of organs for transplantation.

Funding levels for the past five fiscal years were as follows:

1986	$2,871,000
1987	$7,400,000
1988	$6,032,000
1989	$4,940,000
1990	$3,948,000

Organ Transplantation:

Rationale for the Budget Request

The FY 1991 request of $3,257,000 will provide continued support for the OPTN and the Scientific Registry of Transplant Recipients. Of this amount, $1,382,000 would be used to continue funding of the OPTN. The request also provides $1,184,000 for support for the Scientific Registry and $691,000 for program support costs.

The decrease of $691,000 from the FY 1990 Current Estimate reflects reductions in technical assistance and support to OPOs.

Health Care Delivery and Assistance

Buildings and facilities:
Authorizing legislation--Title III of the Public Health Service Act.

1991 Authorization: Indefinite

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	$877,000	---	-$877,000

Purpose and method of operation

This activity provides for the correction of life safety code deficiencies that exist within the Gillis W. Long Hansen's Disease Center at Carville, Louisiana, and for renovation and modernization of buildings at the Center to eliminate structural deficiencies in keeping with accepted standards of safety, comfort, human dignity, efficiency and effectiveness. The projects are intended to assure that the facility provides a safe and functional environment for the delivery of patient care, research, and training activities.

Funding levels for the past five years were as follows:

1986	$750,000
1987	$750,000
1988	$718,000
1989	$889,000
1990	$877,000

Rationale for the Budget Request:

No funds are requested in this account since repairs and renovations would be funded through the Hansen's Disease Center reorganization plan.

Health Care Delivery and Assistance

Buildings and facilities:

List of Planned Projects for Fiscal Year 1990 at the National Hansen's Disease Center, Carville, La.

First Quarter Projects	
1. Roofing Building 33	$111,700
2. Animal Care Renovations	221,080
3. Supplies	43,000
Total First Quarter Projects	$375,780
Second Quarter Projects	
1. Building 31 Fire Exit	30,159
2. Building 5 Water Treatment	11,170
3. Supplies	43,000
Total Second Quarter Projects	$84,329
Third Quarter Projects	
1. Exterior Cleaning & Painting (6 Buildings)	106,115
2. Roof Repairs to Walkways	111,700
3. Floor/Wall Repairs to Walkway (Buildings 19 - 30)	44,630
4. Supplies	43,000
Total Third Quarter Projects	$305,445
Fourth Quarter Projects	
1. Fire Alarm Repairs	15,000
2. Equipment	8,000
3. Asbestos Abatement Project	45,446
4. Supplies	43,000
Total Fourth Quarter Projects	$111,446
GRAND TOTAL	$877,000

Program Management

Program Management: Health Resources and Services Administration

Authorizing legislation--Public Health Service Act, Title III, Section 301.

1991 Authorization: Indefinite

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	$93,384,000	$94,765,000	+$1,381,000
(FTE):	(1,433)	(1,328)	(-105)

Purpose and Method of Operations

The Health Resources and Services Program Management activity has leadership responsibility by coordinating, directing, and managing the functions and activities of the Health Resources and Services Administration by supporting a staff to plan, direct, and administer the Bureau of Health Care Delivery and Assistance, the Bureau of Health Professions, the Bureau of Maternal and Child Health and Resources Development, and the Office of the Administrator.

The Program Management activity includes funds for the overall management, planning, direction and administration of the programs of the Bureau of Health Care Delivery and Assistance, including funds to support salaries, related expenses, and other administrative activities. Personnel and activities are located in the Central Office and ten Regional Offices. National leadership and direction as well as local technical assistance and program guidance is provided to the:

- Primary Care Categorical Grants including Community Health Centers, Migrant Health Centers, Black Lung Clinics and Infant Mortality initiatives;
- National Health Service Corps;
- Loan Repayment Program;
- Health Care for the Homeless;
- Hansen's Disease Programs;
- Health Services at HUD-Funded Housing Projects;
- Federal Employee Occupational Health; and the
- Community Health Care Services for AIDS.

Grants administration, data monitoring and analysis and debt collection activities are also performed under the Program Management activity.

For the Bureau of Health Professions, the program management activity supports the administrative costs of operating programs designed to encourage participation by individuals from disadvantaged backgrounds in health professions and nursing educational programs and to carry out major student

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Program Management: Health Resources and Services Administration

assistance activities. Program leadership and direction is focused on new and continuing responsibilities including the:

- Health Career Opportunities program;
- Health Professions Institutional Development and Assistance;
- Health Professions Student Loan Revolving Fund;
- Nursing Student Loan Revolving Fund;
- National Practitioner Data Bank;
- Health Education Assistance Loan program including the Student Loan Insurance Fund;
- AIDS Education and Training Centers Activity;
- Vaccine Injury Compensation Program; and the
- Orderly closeout of health professions/nursing categorical grants.

Operation of some of the activities is labor intensive and includes tasks such as: due diligence monitoring, loan write-off recommendations; default recommendations; program reviews; audit reviews; and developing and maintaining policies and procedures to prevent waste, fraud and abuse.

Program Management funds allocated to the Bureau of Maternal and Child Health and Resources Development will be used to:

- Implement the Maternal and Child Health Block Grant including the set-aside for Special Projects of Regional and National Significance ;
- Initiate one-stop health/social services for mothers and children;
- Administer Organ Transplantation programs;
- Administer the AIDS Service Demonstration Grants;
- Administer Pediatric AIDS Health Care Demonstration grants;
- Monitor AIDS facilities renovation and construction grants;
- Monitor approximately $700 million in outstanding health facility loans and loan guarantees;
- Monitor over 600 grants and loan guarantees made to health education facilities under Titles VII and VIII of the PHS Act, and
- Provide technical assistance to health facilities on efficient design, construction, energy cost management and operation of facilities.

Activities in the Office of the Administrator supported by program management funds include two broad functions - program planning and evaluation, and administrative management, which includes direct staff assistance, policy guidance, management evaluations in the areas of contracts and grants administration, financial management, personnel management, property management, legislative services, communications and public affairs and equal

Program Management: Health Resources and Services Administration

employment opportunity. In addition, funds are allotted for program purposes to:

- Work with States and local communities to insure access to health care for those living in rural America;
- Coordinate the Agency's varied AIDS activities; and
- Organize and direct the new Minority Health Initiative.

Funding levels for the past five fiscal years were as follows:

1986	$105,433,000
1987	$ 91,306,000
1988	$ 87,965,000
1989	$ 89,964,000
1990	$ 93,384,000

Rationale for the Budget Request

The FY 1991 budget request for $94,765,000 and 1,328 FTEs will maintain program direction and management services for all of the operating programs of the Health Resources and Services Administration. The request is sufficient to support all required activities; any staff no longer needed due to the reductions to health professions programs changes will be transferred to higher priority assignments not subject to a reduction in force.

Program Management

Program Management: Health Resources and Services Administration

Program Management FTEs

	FY 1989	FY 1990	FY 1991
BHCDA	564	571	585
BHPr	283	290	113
BMCHRD	356	353	365
Office of the Administrator	213	219	188
Total	1,416	1,433	1,328

Rural Health

Rural health:

Authorizing legislation--Title III of the Public Health Service Act

1991 Authorization: Indefinite

	1990 Current Estimate	1991 Estimate	Increase or Decrease
Budget authority:	$3,380,000	$4,380,000	+$1,000,000

Purpose and method of operation

The Office of Rural Health Policy serves as a focal point within the Department for coordinating public and private sector efforts nationwide to strengthen and improve the delivery of health services to populations in rural areas. Specifically, the office: (1) Works within the Department and with other Federal agencies, States, national associations, foundations, and private sector organizations to seek solutions to health care problems in rural communities; (2) advises the Secretary on the effects that the Medicare and Medicaid programs have on access to health care by rural populations, especially with regard to the financial viability of small rural hospitals and the recruitment and retention of health professionals; (3) coordinates rural health research within the Department; (4) administers a grant program which supports the activities of Rural Health Research Centers; (5) provides staff support to the National Advisory Committee on Rural Health; (6) maintains a national clearinghouse for the collection and dissemination of rural health information; and (7) provides technical assistance to rural hospitals.

Funding levels for the past five fiscal years were as follows:

1986	---
1987	---
1988	$1,436,000
1989	$1,482,000
1990	$3,380,000

Rationale for the Budget Request

The FY 1991 request for $4,380,000 will provide support for the Office and: $2,180,000 for 7 ongoing research and outreach programs; approximately $400,000 for the third year of a grant to Texas Tech University for its MEDNET interactive communications network; $400,000 to support the activities of the advisory committee; and $400,000 to establish a clearinghouse for rural health care information. The $1,000,000 increase over FY 1990 will allow the Office to begin to further address the problems of rural communities that are in

Rural health:

danger of losing access to hospital care. Assistance programs would be developed using private consultants who would respond to the typical problems of rural hospitals.

	FY 1990	FY 1991
# of grant awards	7 1/	7 1/

1/ Does not include the Texas Tech University MEDNET project.

Acquired Immune Deficiency Syndrome (AIDS)

1991 Authorization:

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget authority:	$112,503,000	$72,679,000	-$39,824,000
FTEs	(50)	(55)	(+5)

Note: The FTEs associated with the HRSA AIDS program are contained in the Health Resources and Services Program Management account.

Overview

The HRSA role in the national battle against AIDS incorporates a broad range of service and education/training projects in keeping with the Agency's functional responsibilities and the recommendations of the Report of the Presidential Commission on the Human Immunodeficiency Virus Epidemic (PC) and the Institute of Medicine's Confronting AIDS Update 1988 (IOM). The HRSA AIDS program is a translation of the recommendations of these reports into a course of action which addresses the recommendations in a practical, economical way by proposing new initiatives where appropriate, expanding ongoing activities where required and maintaining current services levels where expansion is not feasible. The HRSA multi-faceted program includes AIDS education for practitioners, AIDS curricula development, and AIDS training for supporting health workers; community health care services for persons with HIV infections; demonstrations of community efforts in AIDS treatment; demonstrations of care and management of pediatric AIDS patients; and AIDS facilities renovation.

The Agency's first action in FY 1986 against AIDS was the establishment of four Service Demonstration Grants which provided $15.3 million in grant awards to New York, San Francisco, Los Angeles, and Miami, and $1.55 million for a network of Education and Training Centers (ETCs) for health care providers in FY 1987. In 1990, HRSA incorporated curricula development for health professions schools and training programs for staff of federally funded facilities into the ETC network. The ETC network will continue to support 15 centers in FY 1990, and will expand to 18 centers in FY 1991.

Curricula development for health professions schools will ensure that students are provided adequate education regarding HIV infection and related subjects in order to be prepared to provide appropriate care to HIV infected patients.

The HRSA program to train staff of federally funded health care facilities directly responds to the needs of management, health care personnel and others who are involved in providing care to HIV infected and AIDS patients.

Both reports endorse coordinated medical and social services devoted to infants and children which are family focused and community based. The PC report also strongly urges intervention in areas with a lower incidence of HIV infection. The HRSA Community Health Care Services for AIDS, AIDS Service Demonstration Grants, and Pediatric AIDS Health Care Demonstration Grants respond to these recommendations with continuing programs in FY 1991.

To provide long term, non-acute care facilities for HIV infected individuals and community based residential care and hospice care to meet the needs of pediatric patients, HRSA proposes to continue its AIDS Facilities Renovation program for FY 1991.

Provision of health care services to HIV infected individuals is an expanding problem. HRSA has responded by continuing its comprehensive program of service delivery joined with capacity building through existing provider mechanisms and delivery sites.

Patient Care/Health Care

Public Health Control Measures - Information/Education

AIDS Education and Training Centers (ETCs)

The HRSA network of AIDS Education and Training Centers (ETCs) provides: the specialized training needed by existing health care personnel who must care for patients with HIV infection; the development of model educational programs throughout the continuum of the health professions educational process; and the training of staff in federally supported entities in areas of patient/client counseling and the specific aspects of the delivery of health care to HIV-infected individuals and AIDS patients. The concept of such a program for health professions education and curricula development is in agreement with the recommendations highlighted by both the Presidential Commission report and the Institute of Medicine report.

The current national network of ETCs for health care providers focuses on a principal goal of improving the capacity and capability of the provider community to deliver care to HIV-infected individuals. This activity includes specialized training required by primary health care providers who treat HIV-infected patients whose conditions vary from cancers or pneumonia to psychosocial problems.

New advances for therapeutic intervention and monitoring of the HIV infected patient mandate accelerated training of all health care providers. There are new demands on those seeing asymptomatic HIV positive patients to screen and treat for tuberculosis; detect, refer, and manage substance abusers; and provide services to families of HIV-infected individuals necessitating preparatory training modalities. The numbers of people to be evaluated for medical services have dramatically increased into the millions as a result of these new medical developments.

The increase in funding will attempt to increase the numbers and capabilities of involved health care providers, both for management of early stages of infection as well as the later-stage complications.

Specifically, greater emphasis will be placed on increasing effective training of health care providers on therapeutic advances and studies, targeting training needs in minority communities, extending the developing of faculty training programs in health professional schools, and providing increased training for providers in high risk populations such as community health centers, migrant health centers, sexually transmitted disease clinics, substance abuse programs, and maternal and child health clinics. During the past two years, the ETCs trained over 375,000 health care providers throughout the nation.

Program Output Data:	FY 1990 Current Estimate	FY 1991 Request
Information/Education		
Education and Training Centers		
Amount	$14,549,000	$21,000,000
Projects	15	18
Individuals Trained	400,000	802,000

Funding levels for the past five fiscal years were as follows:

1986............................	---
1987............................	$ 1,550,000
1988............................	$11,106,000
1989............................	$14,640,000
1990............................	$14,549,000

Rationale for the Budget Request

In FY 1991, $21,000,000 is requested for ETCs. This amount will support 18 projects training approximately 802,000 health practitioners and 1,200 staff members of federally-funded health facilities.

Services and Research/Evaluation/Demonstration Projects

Community Health Care Services for AIDS

The community health care services for AIDS program will concentrate on providing care for persons with the AIDS/HIV infection in community health centers and migrant health centers (C/MHCs) that may ultimately help to relieve the burden on inpatient and long term care public facilities while improving efforts to mainstream the care for this population into the general health care system. These measures are consistent with HRSA's current efforts to mainstream services for the HIV infected into existing primary care networks.

AIDS:

The C/MHCs provide health care to about six million underserved persons in urban and rural settings. While no statistically reliable information is available to estimate the potential number of AIDS/HIV infected patients, it is quite likely that by FY 1991 the number of seropositive individuals will reach 270,000 or higher.

Currently, available services in many communities for persons with AIDS/HIV infection are relatively uncoordinated, fragmented, and often very expensive. Reimbursement for these services is variable and may be inadequate, particularly for out-of-hospital care, since a large and growing number of persons with AIDS are also poor and medically uninsured, or are persons covered only by Medicaid or other forms of public assistance. If a wider range of community-oriented, coordinated, ambulatory health care is available, hospital costs and possibly other related costs could be decreased. Focusing resources on outpatient services, home health care, or hospice care is likely to improve continuity and reduce the cost of HIV/AIDS patient care.

Program Output Data:	FY 1990 Current Estimate	FY 1991 Request
Community/Migrant Health Centers		
Amount	$10,777,000	$13,323,000
HIV/AIDS population served	32,800	38,200
Medical encounters	525,000	600,000

HIV Service Demonstration Grants

A principal emphasis of HRSA in addressing the health and medical care needs created by the HIV epidemic is to facilitate the enhancement of health care delivery by building on existing services and systems. Accomplishment of this goal requires the organization of comprehensive service delivery systems heretofore incompletely developed or missing entirely in many communities. Grants to support service demonstration projects (SDPs) have been awarded to 25 metropolitan areas in 15 states, the District of Columbia, and Puerto Rico which have the highest cumulative prevalence of AIDS cases. The major purposes of these demonstration projects have been to support and facilitate the organizations of systems of care for Persons with AIDS (PWAs) through the development of a coalition of service providers and community organizations; to identify gaps in service needs and develop a comprehensive continuum of services to meet those needs; to promote coordination and integration of community resources; to ensure continuity of services through effective case management; and to provide appropriate and cost-effective alternatives to hospitalization for PWAs.

AIDS:

Output Data ($000s):

	FY 1990 Current Estimate	FY 1991 Request
High Prevalence Areas:		
Existing Projects (Non-Competing)		
Amount	$13,314	$11,709
Grants	8	7
Existing Projects (Competing)		
Amount	$ 3,895	$ 7,715
Grants	5-8	9-11
Total	$17,209	$19,424

Funding levels for the past five fiscal years were as follows:

1986	$15,312,000
1987	$10,000,000
1988	$14,361,000
1989	$14,692,000
1990	$17,209,000

Pediatric AIDS Health Care Demonstration Grants

These grants are awarded to projects which demonstrate strategies and innovative models of intervention in pediatric AIDS. Through November 1989, 115,158 cases of AIDS had been reported to the Centers for Disease Control (CDC). Of these, 1,947 were infants and children 0 to 12 years of age and 447 were adolescents 13 to 19 years of age. At least one half of the total of 2,394 cases in this pediatric population have died. The vast majority of pediatric AIDS cases are found in minority groups. The PHS predicts an increase in pediatric AIDS cases by 1991 to a total of 3,000 cases.

The cost of providing a full range of services for the pediatric AIDS population is expected to continue to escalate. These high costs largely reflect daily inpatient hospital rates for children and the long periods of hospitalization these children often experience. Comprehensive ambulatory care and community-based services, which pediatric AIDS demonstration projects encourage, are expected to reduce these high costs. The projects are also designed to further coordinate services for children and women of child-bearing age with HIV infection, AIDS or related conditions, or those at risk for developing infection and its consequences. More specifically, the projects are intended to: (1) demonstrate effective ways to prevent infection, especially through the reduction of perinatal transmission; (2) develop community based, family centered, coordinated services for infected infants and children; and (3) develop programs to reduce the spread of HIV infection to vulnerable populations of young people.

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AIDS:

Program Output Data:	FY 1990 Current Estimate	FY 1991 Request
Amount	$14,803,000	$14,803,000
Projects	20 - 25	20 - 25

Funding levels for the past five fiscal years were as follows:

1986	0
1987	0
1988	$ 4,787,000
1989	$ 7,806,000
1990	$14,803,000

Rationale for the Budget Request

The FY 1991 Request of $47,550,000 for Patient Care and Health Care Needs will provide $13,323,000 for Community Health Care Services for AIDS; $19,424,000 for AIDS Service Demonstration Grants; and $14,803,000 for Pediatric AIDS Health Care Demonstration Grants.

The $13,323,000 request for the C/MHC programs will provide for the delivery of outpatient services to approximately 38,200 AIDS/HIV infected persons representing an estimated 600,000 medical encounters. In medically underserved areas, the full range of health services required for intensive treatment of AIDS is unavailable. Finding adequate numbers of physicians, dentists and other primary care personnel who are willing to treat AIDS patients has become an increasingly significant problem, particularly in the high prevalence areas where recruitment of physicians is already difficult.

The $19,424,000 for HIV Service Demonstration Grants will provide limited support for up to 18 of the 25 existing projects. AIDS service demonstration projects are a high priority initiative cited in the Presidential Commission report and the Institute of Medicine report.

The request of $14,803,000 for Pediatric AIDS Health Care Demonstration Grants, will fund existing activities and some new activities designed to reduce costs, increase the effectiveness of care and improved prevention of AIDS infection among pediatric populations. Both the Presidential Commission report and the Institute of Medicine report stress the need for community based coordinated services and residential care for infants and children.

AIDS:

Construction

AIDS Facilities Renovation

People with HIV infection and its complications have specific needs for care in non-acute care facilities. Their care needs are often too broad (nursing, psychosocial, drug therapy, social services) and too intensive to be appropriately provided by existing non-acute care facilities with their present complement of staff. Persons with HIV are not always welcomed by, or compatible with, a mostly geriatric population of patients and their families and visitors. If the person infected with HIV is also an intravenous drug abuser (IVDA) these issues are exacerbated. Moreover, existing non-acute care facilities do not meet the needs of people infected with HIV for transitional housing, including in-home supportive services and longer-term residential care, nor do they meet the special health care needs of pediatric AIDS cases.

To address this problem, new types of non-acute care facilities for people infected with HIV, including children and adolescents, which combine elements of existing intermediate and long term care (LTC) facilities and provide a broad range of services need to be developed. Anecdotal evidence indicates that HIV infected patients unnecessarily remain in hospitals because there is an inadequate number of sub-acute care facilities to receive patients upon discharge from the hospital. Because of the intensity of services required by AIDS patients, revenue is inadequate to support both the operating and capital costs of a facility. Thus, Federal money is requested to assist projects to construct and/or renovate these non-acute care facilities for AIDS patients. The high demand for facilities such as these is stressed in the Presidential Commission report and the Institute of Medicine report.

Output Data:	FY 1990 Current Estimate	FY 1991 Request
Amount	$4,342,000	$4,129,000
Projects	10 - 12	10 - 11

Funding levels for the past five fiscal years were as follows:

1986	0
1987	0
1988	$6,702,000
1989	$3,903,000
1990	$4,342,000

AIDS

Rationale for the Budget Request

The FY 1988 and FY 1989 grants program resulted in funding from other sources to construct/renovate facilities at an approximate 4:1 ratio (i.e. four non-federal dollars for one federal dollar). The $4,129,000 requested for this program could generate approximately $16.5 million of capital from other sources to construct/renovate facilities serving persons with AIDS.

The FY 1991 AIDS request includes program support costs of $4,850,000 and 55 FTEs.

Formula Grants to States for Home Health Care

As AIDS and the HIV infection becomes a chronic illness, the availability of home health services under a plan established by a health care professional, can be a desirable alternative to a sub-acute care facility or the more expensive alternative of hospitalization. In FY 1990 HRSA will provide grants to states to encourage the development and provision of home and community-based health services. The administration has not requested funds for this activity in FY 1991.

Program Output Data:	FY 1990 Current Estimate	FY 1991 Request
Amount	$19,737,000	---
Grants	57	---

Funds for the first five fiscal years were as follows:

1986	0
1987	0
1988	0
1989	0
1990	$19,737,000

Subacute Care Demonstration Projects

Up to three demonstration projects in geographically diverse areas are planned in FY 1990. Their purpose is to provide limited support for the development and operation of subacute care facilities to assist in maintaining AIDS patients. The Administration has not requested funds for this activity in FY 1991.

AIDS

Program Output Data:	FY 1990 Current Estimate	FY 1991 Request
Amount	$ 1,480,000	---
Grants	3	---

Funding levels for the past five fiscal years were as follows:

1986...........................	0
1987...........................	0
1988...........................	0
1989...........................	0
1990...........................	$ 1,480,000

HIV Drug Reimbursement

By the end of FY 1990, a total of nearly $74,000,000 in Federal grant funds will have been distributed to assist States and insular areas to provide financial help to pay for drugs determined to prolong life or prevent serious deterioration of health of people with AIDS or HIV infection. States have used these funds to cover the cost of drugs for low-income individuals whose drugs are not covered by Medicare, state Medicaid or other third party payers. The States must define low-income for the purposes of this program. Since many private insurers and all States now pay for some HIV treatment drugs, these grants have served their purpose and no longer are required.

Program Output Data:	FY 1990 Current Estimate	FY 1991 Request
Amount	$29,606,000	---
Grants	57	---

Funding levels for the past five fiscal years were as follows:

1986...........................	0
1987...........................	$30,000,000
1988...........................	0
1989...........................	$15,000,000*
1990...........................	$29,606,000

(* Excludes $5,000,000 gift from Burrough-Wellcome). The total FY 1989 grant awards was $20,000,000.

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AIDS:

HIV Funding by Functional Category
(in thousands of dollars)

HEALTH RESOURCES AND SERVICES ADMINISTRATION

	FY 1990	FY 1991	Increase or Decrease
Basic Science Research...........	---	---	---
Risk Assessment and Prevention...	$14,549	$21,000	+$6,451
Product Evaluation, Research and Monitoring....................	---	---	---
Clinical Health Services Research and Delivery..................	97,954	51,679	-46,275
PHS-Wide Activities..............	---	---	---
TOTAL, HRSA......................	112,503	72,679	-39,824

MATERNAL & CHILD HEALTH BLOCK GRANT
STATE ALLOCATIONS
Fiscal Years 1989, 1990, 1991

	FY 1989 Actual	FY 1990 Current Estimate	FY 1991 Estimate
Alabama..............	10,270,425	10,407,474	10,407,474
Alaska...............	942,445	950,345	950,345
Arizona..............	4,838,227	4,903,463	4,903,463
Arkansas.............	6,157,840	6,236,329	6,236,329
California...........	28,289,689	28,774,939	28,774,939
Colorado.............	6,314,011	6,360,492	6,360,492
Connecticut..........	4,202,874	4,249,763	4,249,763
Delaware.............	1,819,770	1,832,766	1,832,766
District of Columbia.	6,843,600	6,862,968	6,862,968
Florida..............	14,157,783	14,375,919	14,375,919
Georgia..............	13,751,423	13,925,014	13,925,014
Hawaii...............	1,982,163	2,000,053	2,000,053
Idaho................	2,854,958	2,876,874	2,876,874
Illinois.............	18,729,489	18,970,968	18,970,968
Indiana..............	10,527,556	10,623,780	10,623,780
Iowa.................	6,060,256	6,107,706	6,107,706
Kansas...............	4,113,186	4,150,136	4,150,136
Kentucky.............	10,109,652	10,226,517	10,226,517
Louisiana............	11,182,974	11,339,236	11,339,236
Maine................	3,174,505	3,199,887	3,199,887
Maryland.............	11,016,646	11,089,579	11,089,579
Massachusetts........	10,331,585	10,429,134	10,429,134
Michigan.............	16,554,113	16,737,032	16,737,032
Minnesota............	8,245,597	8,305,329	8,305,329
Mississippi..........	8,515,267	8,638,962	8,638,962
Missouri.............	10,815,059	10,914,444	10,914,444
Montana..............	2,101,803	2,117,807	2,117,807
Nebraska.............	3,656,730	3,683,793	3,683,793
Nevada...............	1,126,574	1,137,378	1,137,378
New Hampshire........	1,846,451	1,858,581	1,858,581
New Jersey...........	10,368,423	10,508,683	10,508,683
New Mexico...........	3,382,484	3,428,660	3,428,660
New York.............	34,777,901	35,223,041	35,223,041
North Carolina.......	14,491,914	14,643,539	14,643,539
North Dakota.........	1,690,130	1,703,789	1,703,789

MATERNAL & CHILD HEALTH BLOCK GRANT
STATE ALLOCATIONS
Fiscal Years 1989, 1990, 1991

	FY 1989 Actual	FY 1990 Current Estimate	FY 1991 Estimate
Ohio.................	19,369,474	19,573,594	19,573,594
Oklahoma.............	5,980,100	6,047,172	6,047,172
Oregon...............	5,267,237	5,310,606	5,310,606
Pennsylvania.........	21,605,824	21,822,788	21,822,788
Rhode Island.........	1,460,233	1,476,746	1,476,746
South Carolina.......	10,190,480	10,289,354	10,289,354
South Dakota.........	2,058,695	2,079,235	2,079,235
Tennessee............	10,116,311	10,249,996	10,249,996
Texas................	24,865,092	25,267,522	25,267,522
Utah.................	5,473,884	5,502,781	5,502,781
Vermont..............	1,597,657	1,607,749	1,607,749
Virginia.............	11,022,452	11,132,233	11,132,233
Washington...........	7,364,169	7,429,660	7,429,660
West Virginia........	5,816,702	5,868,433	5,868,433
Wisconsin............	9,777,755	9,848,343	9,848,343
Wyoming..............	1,105,178	1,110,784	1,110,784
American Samoa.......	418,764	423,525	423,525
Guam.................	646,758	654,111	654,111
Northern Marianas....	395,500	399,996	399,996
Puerto Rico..........	13,484,200	13,637,494	13,637,494
Trust Territories:...			
Marshalls..........	195,422	197,644	197,644
Micronesia.........	442,029	447,054	447,054
Palau..............	125,630	127,058	127,058
Virgin Islands.......	1,270,251	1,284,692	1,284,692
Undistributed........	88,974,700	83,044,050	83,044,050
TOTAL :	554,268,000	553,627,000	553,627,000

ADVISORY AND ASSISTANCE SERVICES
Department of Health and Human Services
Health Resources and Services Administration
(In Thousands of dollars)

I.	Non-Evaluation/Evaluation		FY 1989	FY 1990	FY 1991
	Individual Experts and Experts & Consultants	B.A.	316	100	100
		Oblig.	316	100	100
		Outlays	316	100	100
	Studies, Analyses & Evaluations	B.A.	1,792	1,834	1,834
		Oblig.	1,792	1,834	1,834
		Outlays	1,792	1,834	1,834
	Management & Professional Support Services	B.A.	6,036	5,335	5,335
		Oblig.	6,036	5,335	5,335
		Outlays	6,036	5,335	5,335
	Engineering & Technical Services	B.A.	---	---	---
		Oblig.	---	---	---
		Outlays	---	---	---
	Subtotal	B.A.	8,144	7,269	7,269
		Oblig.	8,144	7,269	7,269
		Outlays	8,144	7,269	7,269
II.	Personnel Appointments	B.A.	113	45	45
		Oblig.	113	45	45
		Outlays	113	45	45
III.	Advisory Committees	B.A.	92	170	170
		Oblig.	92	170	170
		Outlays	92	170	170
	TOTAL	B.A.	8,349	7,484	7,484
		Oblig.	8,349	7,484	7,484
		Outlays	8,349	7,484	7,484

Estimates and Advisory and Assistance Services

Office of the Administrator

Obligations for related services will support activities related to Malpractice Data Bank, Black Medical symposium for rural health and Emergency Preparedness.

Bureau of Health Care Delivery and Assistance

Estimated costs of BHCDA Advisory and Assistance for 1991 will be used to support the activities related to the National Advisory Council on the National Health Service Corps and the National Advisory Council on Migrant Health.

Bureau of Health Professions

Consulting services performed by the Bureau of Health Professions represent costs essential to the conduct of the Bureau's extramural program activities. These expenditures are mainly to hold Health Professions and Nurse Education National Advisory Council meetings and peer review meetings mandated by law for grant programs. Costs consist of honorarium, travel, and per diem administrative costs associated with conducting all meetings. In addition, Public Law 99-272 authorized the establishment of the Council on Graduate Medical Education (COGME) with a legislative mandate to make recommendations and report to the Secretary and Congress every 3 years on a number of graduate medical education issues pertaining to physicians. This Council would terminate on September 30, 1996.

In FY 1989 consultant services were utilized for National Advisory Council meetings and peer review meetings for health professions (primary care programs, disadvantaged assistance, health promotion and disease prevention programs, institutional support, and the geriatrics education and area health education centers programs) and nurse education programs. Consultant Services funds were also used to provide consulting services to institutions participating in the Health Professions and Nursing Student Loan Programs on fiscal accountability of debt management and debt collection.

The FY 1990 Budget Estimate includes operating funds for the Council on Graduate Medical Education, the National Advisory Council and peer review expenses.

These services and activities provide up-to-date, analyzed information on the training, supply, distribution and utilization of practicing health professionals and faculty with education and training in geriatrics and gerontology. This information is essential to the Department, the Congress, and the private sector in considering, developing and implementing national health policy decisions related to health care needs of the rapidly expanding elderly population.

The management and professional services focus on addressing the health professions needs of States based on emerging health care problems and high priority health care needs of the States. The special studies and analyses services assist public and private entities by supporting projects focusing on a variety of areas covering the delivery of health care, which may include technical assistance to States, credentials review, risk management and quality assurance, and public and professional education.

Bureau of Maternal and Child Health and Resources Development

The services procured are required to obtain a range of program review, program development and other services from sources specializing in management and development of hospitals and other health delivery facilities and particularly in capital development for these facilities. Such specialized knowledge does not exist in-house, but is required to fulfill the organization's mission regarding financing and construction of health facilities. Also, these costs will be used to support the Maternal and Child Research Grants Review Committee.

Obligations for related services will support activities related to AIDS and Maternal and Child Health programs.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
HEALTH RESOURCES AND SERVICES ADMINISTRATION
HEALTH RESOURCES AND SERVICES

Detail of Permanent Positions

	1989 Actual	1990 Estimate	1991 Estimate
ES-5	2	2	2
ES-4	9	9	9
ES-3	3	3	3
Subtotal	14	14	14
GS/GM-15	74	74	69
GS/GM-14	152	151	136
GS/GM-13	260	256	233
GS-12	172	162	139
GS-11	86	84	77
GS-10	6	6	5
GS-9	111	106	84
GS-8	29	28	24
GS-7	111	102	89
GS-6	115	107	59
GS-5	112	107	91
GS-4	51	49	35
GS-3	8	8	4
GS-2	5	5	4
Subtotal	1,292	1,245	1,049

DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
HEALTH RESOURCES AND SERVICES ADMINISTRATION
HEALTH RESOURCES AND SERVICES

Detail of Permanent Positions

	1989 Actual	1990 Estimate	1991 Estimate
Commissioned Officer:			
CO-8	3	4	4
CO-7	3	3	3
CO-6	115	115	115
CO-5	102	102	102
CO-4	70	70	70
CO-3	18	18	18
CO-2	7	7	7
Subtotal	318	319	319
Ungraded	58	39	26
Total Permanent Positions	1,682	1,617	1,408
Total Permanent Employment, end of year	1,682	1,617	1,408

JUSTIFICATION OF THE BUDGET ESTIMATES

DEPARTMENT OF HEALTH AND HUMAN SERVICES
HEALTH RESOURCES AND SERVICES ADMINISTRATION

Medical Facilities Guarantee and Loan Fund

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MEDICAL FACILITIES GUARANTEE AND LOAN FUND

FEDERAL INTEREST SUBSIDIES FOR MEDICAL FACILITIES

For carrying out subsections (d) and (e) of section 1602 of the Public Health Service Act, [$21,000,000] *$20,000,000*, together with any amounts received by the Secretary in connection with loans and loan guarantees under title VI of the Public Health Service Act, to be available without fiscal year limitation for the payment of interest subsidies. During the fiscal year, no commitments for direct loans or loan guarantees shall be made.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

HEALTH RESOURCES AND SERVICES ADMINISTRATION

Medical Facilities Guarantee and Loan Fund

Amounts Available for Obligation

	1989 Actual	1990 Estimate	1991 Estimate
Appropriation...............	$21,600,000	$21,000,000	$20,000,000
Receipts and reimbursements from:			
Non-Federal sources...	13,582,000	14,310,000	14,113,000
Unobligated balance, start of year	48,013,000	35,843,000	28,687,000
Unobligated balance, end of year	-35,843,000	-28,687,000	-29,195,000
Redemption of Debt..........	-8,318,000	-6,666,000	-6,905,000
Total obligations	$39,034,000	$35,800,000	$26,700,000

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Obligations

Summary of Changes

1990 Obligations	$35,800,000
1991 Obligations	$26,700,000
Net Change, Obligations	-$9,100,000

	1990 Base Amount	Change from Base Amount
Decrease		
Built-in:		
1. Interest expense to FFB..	800,000	-100,000
2. Default payments.........	15,000,000	-9,000,000
Total Decreases		-$9,100,000
Net Change		-$9,100,000

Obligations by Activity

	1989 Actual	1990 Estimate	1991 Estimate
Investments and loans	$17,884,000	$15,000,000	$6,000,000
Grants subsidies & contributions	20,085,000	20,000,000	20,000,000
Interest & dividends	1,065,000	800,000	700,000
Total Obligations	$39,034,000	$35,800,000	$26,700,000

Obligations by Object

	1990 Estimate	1991 Estimate	Increase or Decrease
Investments and loans	$15,000,000	$6,000,000	-$9,000,000
Grants subsidies and contributions	20,000,000	20,000,000	---
Interest & dividends	800,000	700,000	-100,000
Total Obligations	$35,800,000	$26,700,000	-$9,100,000

Authorizing Legislation

	1990 Amount Authorized	1990 Enacted	1991 Amount Authorized	1991 Budget Estimate
1. Interest subsidies:				
(a) PHS Act, Section 1602(c) (3)(ii)	Indefinite	$21,000,000	Indefinite	$20,000,000

Medical Facilities Guarantee and Loan Fund

Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
1973	$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 2,500,000
1974	---	---	---	---
1975	---	---	---	---
1976	10,000,000	10,000,000	10,000,000	10,000,000
1977	31,000,000	31,000,000	31,000,000	31,000,000
1978	41,000,000	41,000,000	41,000,000	41,000,000
1979	42,000,000	42,000,000	42,000,000	42,000,000
1980	45,000,000	45,000,000	45,000,000	45,000,000
1981	---	---	---	---
1982	35,000,000	30,000,000	22,000,000	22,000,000
1983	32,000,000	32,000,000	32,000,000	32,000,000
1984	32,000,000	32,000,000	32,000,000	32,000,000
1985	26,500,000	26,500,000	26,500,000	26,000,000
1986	25,000,000	25,000,000	25,000,000	25,000,000
1987	20,000,000	20,000,000	20,000,000	20,000,000
1988	22,000,000	22,000,000	22,000,000	22,000,000
1989	21,600,000	21,600,000	21,600,000	21,600,000
1990	21,000,000	21,000,000	21,000,000	21,000,000
1991	20,000,000	---	---	---

Medical Facilities Guarantee and Loan Fund

Public Health Service Act, Title XVI

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority	$21,000,000	$20,000,000	-$1,000,000
(Obligations)	($35,800,000)	($26,700,000)	(-$9,100,000)

General Statement

The Medical Facilities Guarantee and Loan Fund was established in 1972 under the Medical Facilities Construction Program in order to make funds available for construction of medical facilities. This was accomplished either by making direct loans or providing guarantees on loans by third parties and paying interest subsidies on guaranteed loans or direct loans sold to the Federal Financing Bank (FFB). The fund is established in the Treasury without fiscal year limitation to make direct loans, pay interest subsidies, make payments of principal and interest in the event default on a guaranteed loan, and repurchase loans sold and guaranteed.

In FY 1991, $20.0 million is requested in budget authority to pay interest subsidy commitments. Also, it is estimated that $6.0 million will be required from the default account to pay defaulted loans in FY 1991. A default account containing approximately $28.0 million at the end of FY 1989 was originally established at $50 million and is used for payment of defaults.

Medical Facilities Guarantee and Loan Fund

Interest Subsidies (Medical Facilities Guarantee and Loan Fund)
Public Health Service Act, Section 1602(c)(3)(ii)

1991 Authorization: Indefinite

	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
Budget Authority:	$21,000,000	$20,000,000	-$1,000,000

Purpose and method of operation

The purpose of the interest subsidy activity is to honor commitments entered into for subsidizing interest payments on guaranteed loans made for modernization, construction, and conversion of hospitals and other non-profit medical facilities. Interest is subsidized at the rate of 3% on guaranteed loans made by private lenders and, in the case of direct loans sold to the Federal Financing Bank, the amount of interest paid from the fund is based on the rate paid by the borrower and the rate given by FFB.

Rationale for the Budget Request

The request for $20.0 million will be used to meet commitments for interest subsidies due on loans as required by the Public Health Service Act as amended.

JUSTIFICATION OF THE BUDGET ESTIMATES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

HEALTH RESOURCES AND SERVICES ADMINISTRATION

Health Education Assistance Loans

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Health Education Assistance Loans (HEAL)

Amounts Available for Obligation
($ in 000's)

	1989 Actual	1990 Appropriation	1990 Current Estimate	1991 Estimate
Appropriation..................	---	$25,000	$24,870 1/	---
Borrowing authority............	---	---	---	---
Reprogramming from other accounts	---	---	---	---
Subtotal, budget authority....	---	$25,000	$24,870	---
Receipts: Insurance premium	$19,692		20,000	14,800
Interest on U.S. Securities..........	207		700	---
Transfer from HPSL/NSL	---		---	15,000
Repayments of loans..	3,766		4,109	4,519
Unobligated balance, start of year:				
Student Loan Insurance Fund balance.....................	2,090		15,714	35,288
U. S. Securities..............				
Unobligated balance, end of year:				
Student Loan Insurance Fund balance.....................	-15,714		-35,288	-23,373
Total, obligations.............	$10,041		$30,105	$46,234

Summary of Changes

1990 New Loan Guarantee Ceiling	$370,071,000 2/
1991 Estimate, Loan Guarantee	$185,000,000
Net Change	-$185,071,000

1/ Excludes $130,000 transferred to Health Resources and Services for Ad Hoc Hospital.

2/ Excludes $272,300,000 loan guarantee authority carried over from the prior year. Also, it reflects sequestration of $4,929,000 from the FY 1990 authorization level of $375,000,000.

Health Education Assistance Loans

Budget Authority by Activity

	1989 Actual	1990 Current Estimate	1991 Estimate
Capital Investments 1/	$8,920,000	$28,605,000	$44,634,000
Death and Disability Claims 2/	1,121,000	1,500,000	1,600,000
Total	$10,041,000	$30,105,000	$46,234,000

1/ Default payments paid from Student Loan Insurance Fund (SLIF).

2/ Payments from SLIF made on death and disability claims.

Budget Authority by Object

	1990 Current Estimate	1991 Current Estimate	Increase or Decrease
Investments and loans 1/	$28,605,000	$44,634,000	+$16,029,000
Insurance claims and Indemnities 2/	1,500,000	1,600,000	+100,000
Total	$30,105,000	$46,234,000	+$16,129,000

1/ Payments from Student Loan Insurance Fund (SLIF) on defaulted loans.

2/ Payments from SLIF made on death and disability claims.

Health Education Assistance Loans

Authorizing Legislation

	1990 Amount Authorized	1990 Current Estimate	1991 Amount Authorized	1991 Budget Request
Public Health Service Act:				
Health education assistance loans and Insurance Fund: (Title VII, part C, subpart I)				
Appropriation 1/.......	Indefinite	$24,870,000	Indefinite	---
Guarantee Authority....	$375,000,000	$370,071,000	$400,000,000	$185,000,000
Borrowing authority 2/..	Indefinite	---	Indefinite	---

1/ Authorized under Sec. 727(b)(2) of the PHS Act. "...for fiscal years after September 30, 1978 such sums as necessary for the purpose of administering this subpart. Sums appropriated under this subsection shall remain available until expended..."

2/ Authorized under Sec. 734(a) and (b) of the PHS Act. "There is hereby established a student loan insurance fund which shall be available without fiscal year limitation..." "If at any time, the monies in the fund are insufficient to make payments in connection with the default of any loan insured by the Secretary under this subpart, the Secretary is authorized to issue to the Secretary of the Treasury notes or other obligations in such forms and denominations, bearing such maturities, and subject to such terms and conditions as prescribed by the Secretary with the approval of the Secretary of the Treasury, but only in such amounts as may be specified from time to time in appropriations Acts."

Health Education Assistance Loans

Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
Appropriation:				
1982	---	---	---	---
1983	---	---	---	---
1984	---	---	---	---
1985	---	---	---	---
1986	---	---	---	---
1987	---	---	---	---
1988	---	---	---	---
1989	---	---	---	---
1990	---	$25,000,000	$25,000,000	$25,000,000
1991	---	---	---	---

Health Education Assistance Loans

Justification

General Statement

Health Education Assistance Loans (HEAL)

To assist in training students in various health fields, the HEAL program was authorized to provide insured loans for students enrolled in schools of allopathic and osteopathic medicine, dentistry, veterinary medicine, optometry, podiatry, public health, pharmacy, chiropractic, and graduate programs in health administration, clinical psychology and allied health.

Eligible student borrowers obtain loans, to be used for tuition and other reasonable educational and living expenses, from participating commercial lenders, educational institutions, State agencies, insurance companies and pension funds. The repayment of principal and interest is guaranteed by the Federal Government if the borrower becomes permanently disabled, dies, or defaults on the repayments.

Student Loan Insurance Fund (SLIF)

SLIF provides repayments to the lenders on defaulted HEAL loans, and for claims due to the death or disability of student borrowers. Deposits to the fund are derived from insurance premiums charged to the borrowers when the loans are made, repayments of defaulted claims, and if necessary, from borrowing authority and/or appropriations.

Health Education Assistance Loans

Health education assistance loans:

Authorizing legislation--Public Health Service Act, Title VII, Sections 727 - 739.

1990 Authorization: Such loan guarantee authority as necessary to continue assistance to prior recipients. Appropriation - Indefinite.

	FY 1990 Estimate	FY 1990 Current Estimate	FY 1991 Estimate	Increase or Decrease
New Loan Guarantee Limitation	$375,000,000	$370,071,000	$185,000,000	-$185,071,000

Purpose and Method of Operations

Health Education Assistance Loans (HEAL)

The HEAL program insures loans provided by non-Federal lenders to students in health professions schools. Principal and interest repayments are guaranteed by the Federal Government. Students may borrow up to $20,000 a year - to an aggregate total of $80,000 (except for pharmacy, chiropractic, public health, allied health, graduate health administration, and clinical psychology students who will be limited to $12,500 a year - to an aggregate total of $50,000). The maximum allowable interest rate (which is determined quarterly) is the prior calendar quarter auction rate for 91-day Treasury bills, plus 3 percent rounded to the next highest 1/8th of one percent. Student borrowers are required to begin repayment of the principal 9 months after they complete training and have a maximum repayment period of 25 years. Payment of principal and interest may be deferred during additional periods of full-time study and for up to 4 years for internship or residency training, and for up to 3 years service in the armed forces, the Peace Corps or other specified program as a full-time volunteer or in the National Health Service Corps.

Student Loan Insurance Fund (SLIF)

The SLIF is maintained with monies derived from an insurance premium charged to student borrowers who secure Health Education Assistance Loans. The insurance premium of 8 percent of the loan principal, is charged when the loan is made. Deposits to the fund are also derived from loan collections from defaulted borrowers and when necessary, from borrowing authority and/or appropriations. Payments are made from the SLIF for defaults, death, and disability of borrowers.

Health Education Assistance Loans

Health education assistance loans:

Rationale for the Budget Request

New Guarantee Authority

No new loan guarantee authority is requested in FY 1991. A total of $185,000,000 of the carryover from prior years is requested to assist 21,201 former borrowers. The HEAL program will begin phasedown in FY 1991. Loans will be made from carryover guarantee authority only. Other sources of funding will be made available to student borrowers from the health professions revolving loan funds, the Department of Education student assistance programs, the Exceptional Financial Need Scholarship, Financial Assistance for Disadvantaged Health Professions Students, and the National Health Service Corps Scholarship programs.

	1989 Actual	1990 Estimate	1991 Request
Loan Disbursements to students ($000)...............	$250,000	$250,000	$185,000
Number of Borrowers.............	28,650	28,650	21,201
Average Amount per Borrower.....	$8,726	$8,726	$8,726

Student Loan Insurance Fund (SLIF)

In 1990 $25 million was appropriated to assure the continued solvency of the SLIF. Although the insurance fund currently has a positive balance, this is primarily due to a delay in claims submission resulting from the new requirement that lenders must litigate against defaulted borrowers prior to filing a claim. It is estimated that $46,000,000 claims will be paid in 1991. The budget request also provides $15 million in available funds from the Health Professions and Nursing Student Loan program to the Student Loan Insurance fund to pay for defaults, if the need arises.

Health Education Assistance Loans

	1989 Actual	1990 Estimate	1991 Request
Balance, start of year.........	$2,090,000	$15,714,000	$35,288,000
Appropriation..................	---	24,870,000	---
Collections:			
Premiums.....................	19,692,000	20,000,000	14,800,000
Interest.....................	207,000	700,000	---
Repayments...................	3,766,000	4,109,000	4,519,000
Transfer from HPSL/NSL.......	---	---	15,000,000
Total available..............	$25,755,000	$65,393,000	$68,907,000
Claims:			
Death and disability.........	1,121,000	1,500,000	1,600,000
Defaults.....................	8,920,000	28,605,000	44,634,000
Total claims.................	$10,041,000	$30,105,000	$46,234,000
Ending balance................	$15,714,000	$35,288,000	$23,373,000

JUSTIFICATION OF THE BUDGET ESTIMATES

DEPARTMENT OF HEALTH AND HUMAN SERVICES
HEALTH RESOURCES AND SERVICES ADMINISTRATION

Vaccine Improvement Program Trust Fund

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VACCINE [INJURY COMPENSATION TRUST FUND] *IMPROVEMENT PROGRAM TRUST FUND*

For payments from the Vaccine [Injury Compensation] Improvement Program Trust Fund, such sums as may be necessary for claims associated with vaccine-related injury or death resolved during the current fiscal year with respect to vaccines administered after September 30, 1988, pursuant to subtitle 2 of title XXI of the Public Health Service Act as amended by Public Law 100-203, *and from such trust fund such sums as may be necessary, not to exceed $80,000,000, for compensation of claims adjudicated by the United States Claims Court arising from liability related to the administration of vaccines before October 1, 1988: Provided, That for necessary administrative expenses, not to exceed $1,500,000 shall be available from the Trust Fund to each of the Secretary of the Department of Health and Human Services, the Attorney General, and the United States Claims Court.*

[For compensation of claims resolved by the United States Claims Court related to the administration of vaccines before October 1, 1988, $74,500,000, of which such sums as may be necessary shall be used to reimburse the Vaccine Injury Compensation Trust Fund for any payment of such claims made from the Trust Fund prior to the current fiscal year: Provided, That necessary expenses of the Department of Health and Human Services under the National Childhood Vaccine Injury Act of 1986, not to exceed $1,500,000, shall be reimbursed from the Trust Fund.] (Department of Health and Human Services Appropriations Act, 1990.)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
HEALTH RESOURCES AND SERVICES ADMINISTRATION

Vaccine [Injury Compensation] Improvement Program Trust

Amounts Available for Appropriation

	1989 Actual	1990 Estimate	1991 Estimate
Unappropriated balance, start of year	$77,547,000	$190,930,000	$149,118,000
Unrealized discount	---	-4,664,000	---
Receipts	98,719,000	107,604,000	118,364,000
Interest Income	10,857,000	11,943,000	13,137,000
Reimbursement to Trust Fund from Appropriation	---	305,000	---
Appropriation	---	74,195,000	---
Available for Appropriation	187,123,000	380,313,000	280,619,000
Total:			
Appropriation (obligations)	-66,700,000	-214,200,000	-221,500,000
Unobligated balance returned to unappropriated offsetting receipts	65,843,000	---	---
Net balance end of year	186,266,000	149,118,000	59,119,000
Unappropriated balance, end of year	(190,930,000)	149,118,000	59,119,000
Unrealized discount	(-4,664,000)	---	---
Unappropriated balance lapsing	---	16,995,000	---

HEALTH RESOURCES AND SERVICES ADMINISTRATION
Vaccine Improvement Program Trust Fund

Summary of Changes

1990 Current Estimated Budget Authority	$214,200,000
1991 Estimated Budget Authority..........................	$221,500,000
Net Change	+$7,300,000

	1990 Base Amount		Change from Base Amount	
	POS (FTE)	Amount	POS (FTE)	Amount
Increases				
Built-in:				
Claims for pre-FY 89 Injuries..	---	57,200,000	---	+5,720,000
Claims for FY 89 and FY 90 Injuries...............	---	152,500,000	---	+1,580,000
			---	+7,300,000

Vaccine Improvement Program Trust Fund

Obligations by Activity

	1989 Actual	1990 Estimate	1991 Estimate
Claims contributions	$305,000	$214,200,000	$221,500,000
Total Obligations	$305,000	$214,200,000	$221,500,000

Obligations by Object

	1990 Estimate	1991 Estimate	Increase or Decrease
Claims contributions	$214,200,000	$221,500,000	$+7,300,000

Authorizing Legislation

	1990 Amount Authorized	1990 Enacted	1991 Amount Authorized	1991 Budget Estimate
Vaccine Improvement program Trust Fund:				
(a) PHS Act, Title XXI Subtitle 2, Parts A and D				
Pre-FY 1989 Claims	$80,000,000	$57,200,000	$80,000,000	$62,720,000
Post-FY 1989 Claims	Indefinite	152,500,000	Indefinite	154,080,000
(b) Sec. 6601(r)d OBRA of 1989 (P.L. 101-239)				
U.S. Court of Claims Ops	$1,500,000	$1,500,000	$1,500,000	$1,500,000
HRSA Operations.........	1,500,000	1,500,000	1,500,000	1,500,000
Dept. of Justice Ops....	1,500,000	1,500,000	1,500,000	1,500,000

National vaccine improvement program:
Authorizing legislation--Public Health Service Act, Sec. 2110-23 and 31-34.

1991 Authorization: Such sum as necessary

	1990 Current Estimate	1991 Request	Increase or Decrease
Vaccine Improvement Trust Fund (Budget Authority)....	$214,200,000	$221,500,000	+$7,300,000

Purpose and Method of Operations

The National Childhood Vaccine Injury Act of 1986 amended the Public Health Service Act to establish the National Vaccine Improvement Program to provide compensation for vaccine-related injury or death. The Act requires the service of petitions upon the Secretary of the Department of Health and Human Services and filing with the appropriate United States Claims Court to initiate compensation claims proceedings, which must be completed within 365 days of the service/filing date. The Secretary of HHS is the respondent in compensation claims proceedings.

The Health Resources and Services Administration (HRSA) has been delegated the authority to administer Parts A and D of Subtitle 2. Consistent with this delegation, HRSA will:

- receive petitions for compensation served on the Secretary;
- arrange for medical review of each petition and supporting documentation by physicians with special expertise in pediatrics and neurology and develop recommendations regarding the petitions for compensation;
- develop medical/legal defense of DHHS position on compensation in the U.S. Claims Court;
- publish notice of each petition received in the Federal Register;
- promulgate regulations to modify the Vaccine Injury Table;
- provide administrative support to the Advisory Commission on Childhood Vaccines, composed of 13 members including health professionals, attorneys, legal representatives of children who have suffered a vaccine-related injury or death, and PHS Agency heads; and
- compile data for submission to the Congress on the number of compensation awards for various periods following implementation of the program.

Rationale for the Budget Request

The National Vaccine Injury Compensation Program is financed through the Vaccine Compensation Trust Fund authorized by the Congress for the payment of claims to injured individuals. The costs of program operations incurred by the U.S. Court of Claims and the PHS are also paid out of the trust fund.

The FY 1991 request is for budget authority in the trust fund of $221,500,000:

	FY 1990	FY 1991
Payment of pre-1989 claims.............	$57,200,000	$62,920,000
Payment of 1989-90 claims..............	$152,500,000	$154,080,000
U.S. Court of Claims operations........	1,500,000	1,500,000
HRSA operations........................	1,500,000	1,500,000
Department of Justice..................	1,500,000	1,500,000
Total budget authority...............	$214,200,000	$221,500,000

HRSA is responsible for the disbursement of claims payments from the trust fund as well as other administrative tasks described above.

THURSDAY, MARCH 22, 1990.

CENTERS FOR DISEASE CONTROL

DISEASE CONTROL, RESEARCH, AND TRAINING

WITNESSES

DR. WILLIAM L. ROPER, DIRECTOR, CENTERS FOR DISEASE CONTROL

CLAUDE F. PICKELSIMER, JR., DIRECTOR, FINANCIAL MANAGEMENT OFFICE, CENTERS FOR DISEASE CONTROL

DENNIS P. WILLIAMS, DEPUTY ASSISTANT SECRETARY BUDGET, OFFICE OF SECRETARY, HEALTH AND HUMAN SERVICES

Mr. NATCHER. At this time we take up the budget request for the Centers for Disease Control, and we have before the committee, Dr. William Roper.

Dr. Roper, it is a pleasure to have you before our committee, and before you give us your statement, tell us who you have with you there at the table.

Dr. ROPER. Yes, sir. Thank you.

With me is Mr. Dennis Williams, who is Deputy Assistant Secretary for Budget at the Department of Health and Human Services, and Claude Pickelsimer, who is Director of Office of the Financial Management in CDC.

Mr. NATCHER. We are delighted to have all of you before the committee and we will be pleased to hear from you, Dr. Roper.

OPENING STATEMENT

Dr. ROPER. Thank you, sir.

It is indeed a delight to be back before you, Mr. Natcher, and to talk with you about CDC. The opportunity to appear before you at the beginning of a new decade is indeed a special pleasure.

I believe the 1990s will be an exciting time for public health. We have many opportunities, many challenges that are open before us. The principal road map we have to meet those challenges are the national health objectives for the year 2000 that have just been set, and CDC is one of the principal architects of those objectives, and we are looking forward to working to meet those.

We believe that we have got to be increasingly creative as we try to meet the challenges that lie before us in the 1990s, we must focus not only on preventing disease and death and injury, but enhancing health and the quality of life for all Americans.

Public health faces serious challenges in the 1990s, and I would like to take a few minutes with several of these.

In the area of infectious diseases, we have diagnostic tests, and antimicrobial agents, including some new antiviral drugs, and we also have some new vaccines, but in some cases, such as influenza, organisms continue to change, presenting new challenges, and in other areas we are confronted with new organisms, such as those that cause like AIDS or Lyme disease.

We have to be prepared for the future, and to do that we have to employ the latest technology to develop even better diagnostic tests and newer methods of detecting the changes that microbes undergo.

We think with aggressive leadership, by the year 2000 we can eliminate rubella and measles, we can reverse the trend with hepatitis B and Lyme disease and foodborne disease, and we can move towards our national goal of eliminating tuberculosis in this country.

Infectious diseases are the roots of CDC, but, of course, our mission is broader than that.

The areas of chronic disease, heart disease, cancer, stroke and diabetes are examples of health conditions that are quite preventable, yet we have not applied all we know to prevent them, particularly among minority groups.

Prevention of these chronic diseases or their complications can be achieved by smoking cessation, improved nutrition, better physical fitness, early detection and treatment.

There are some people who are skeptics and question our ability to get people to adopt healthier behaviors, but I think we can demonstrate that people can change their behavior. Indeed, the country, deciding not to smoke, and the rapid progress we are making in improving the health of the public in the area of smoking should give us real hope for the future.

We need to target our efforts in preventing chronic diseases among blacks, Hispanics, Native Americans and low income populations. I think if we apply what we already know, we will see major decreases in uncontrolled high blood pressure, high cholesterol, stroke and breast and cervical cancer by the year 2000.

One of the hallmarks of the last decade, the 1980s, was the recognition that motor vehicle fatalities, homicide, suicide and other kinds of injuries are important priorities for the public health community.

One in four Americans sustains an injury each year and the total life time costs of injuries sustained in just one year, 1985, was calculated to be at $158 billion.

We have made progress in the area of building relationships with the public health community, the transportation community, law enforcement and other fields in order to broaden the Nation's effort to prevent injuries, particularly those related to homicide, suicide and motor vehicle injuries.

Occupational injuries are another important part of our activities. Indeed, we are making new efforts in the area of farm worker injuries. Nine million farm workers and their family members in the United States bear a disproportionate share of injuries and disease. Farm workers comprise the second largest category as far as the numbers of occupational injuries are concerned.

HIV prevention and control remains a major focus of our activities. It demands innovative approaches, and the development of a broad network of health and community organizations in our efforts against HIV infection, and AIDS as a disease.

Last year we developed and disseminated two sets of guidelines on preventing HIV infection in the work place. Since October 1987 our national AIDS public information campaign has secured over $36 million in free public service television air time.

Last year the Institute of Medicine and the National Academy of Sciences, released a major report that I think is going to shape much of what we do in the field of public health over the coming decade.

They reported on a study of the Nation's public health system particularly state and local health departments, and went on to point out a number of problems.

We believe that a strong and efficient network of public health agencies, federal, state and local, with solid ties to their private sector partners is the foundation for effective, preventive programs in the 1990s.

Developments in scientific technology and innovative applications for disease prevention and, of course, our own talented and dedicated work force make us optimistic about our ability to meet these challenges in the 1990s.

We have before you a budget request, Mr. Chairman, of $1,171,755,000. I am pleased to have the chance to talk with you in general and specific about that request.

Let me just add one further note. I count myself especially fortunate to be at CDC, which I believe is the world's preeminent public health institution.

Over the coming years, I believe, Mr. Chairman, one of the things we need to look at is the basic work that CDC has done for the many decades it has been the Nation's leader in the field of prevention.

I would just like to show you a chart that shows what CDC's budget has been over the last decade. This is from fiscal year 1981 through fiscal year 1990, the current fiscal year.

And as you can see, CDC's budget has increased very rapidly over this period of time from a little less than $300,000,000 to now almost $1,100,000,000 in the current fiscal year.

The second chart shows those same figures, but divides the funding for CDC into blue for all non-HIV activities, and into red for activities devoted towards HIV. As you can see, almost all of the increase over the period of the 1980s at CDC was directed at HIV, a very important activity for the Nation to be sure.

And now let me show you the third chart. This takes what we were spending in 1981, 10 years ago, our core program or the basic programs that were in place at the turn of the last decade, and shows what has happened with those programs over that same decade. It is certainly flat funding. The black line that is superimposed is inflation adjusted dollars over that same period, reflecting an actual reduction in half of those programs.

One of the things that I want to devote myself to as CDC Director, Mr. Chairman, is making sure that we have in place this basic public health system, not only in state and local health departments, but within the Federal Government, and particularly within CDC, to meet the challenges that we know are going to come to us in the future.

Thank you very much.

[The information follows:]

OPENING STATEMENT
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Statement BY William L. Roper, M.D., M.P.H.
Director, Centers for Disease Control

Mr. Chairman, it is a pleasure to be here today for CDC's first Appropriations hearing in the new decade. The 1990's promise to be an exciting time for public health, a time when we will march forward toward the elimination of many of the health problems of the past and a time when new technologies will help us build a healthier future for all Americans. As one of the architects of the forthcoming national health objectives for the year 2000, CDC is looking to the future. We know that we cannot be complacent about our accomplishments. Our energies in the 90's must be directed at seeking increasingly creative ways to not only prevent disease, early death, and injury, but to enhance health and quality of life. Our 1991 budget request has been developed to help focus us in this direction.

Health Challenges for the 1990's

Public health faces serious challenges in the 1990's. Infant mortality remains a serious national concern, as the United States has fallen from 7th to 22nd among developed countries in its infant mortality rate over the last two decades. The problem of infant mortality is particularly acute for black infants, who continue to experience twice the risk of infant death and low birth weight than do white infants--ratios that have remained unchanged over two decades. A challenge of the 1990's will be to help those at risk to adopt healthy behaviors that can reduce and prevent the incidence of infant mortality.

Preventing the spread of the human immunodeficiency virus (HIV) also continues to be a high public health priority. While important discoveries have been made that may help prolong the lives of those infected with HIV, a cure or vaccine for the deadly virus is not yet within reach. As the 1990's begin, HIV prevention continues to be the only way of slowing the spread of HIV.

There are other public health challenges ahead in the 1990's. For many infectious diseases, we have diagnostic tests, antimicrobial agents, including several new antiviral drugs, and vaccines, but in some cases, such as influenza, the organisms keep changing. In others, such as AIDS or Lyme disease, entirely new diseases emerge. To be prepared for the future, we must employ the latest technology to develop even better diagnostic tests and newer methods of detecting the microbial changes which will lead to improved vaccines and other prevention strategies, treatments, and more effective ways of getting prevention programs to people. With aggressive leadership on our part and the commitment of our public and private-sector partners, we project that by the year 2000 we can eliminate rubella and measles, reverse the trend in hepatitis B, Lyme disease, and foodborne disease, and move toward our national goal of tuberculosis elimination.

Heart disease, cancer, stroke, and diabetes are examples of health conditions that are preventable; yet we have not applied all that we know to reduce them, particularly among minority groups. Prevention of these chronic diseases or their complications can be achieved through smoking cessation, improved nutrition, better physical fitness, and early detection and treatment. Skeptics question our ability to help people adopt healthier behaviors. But major community-based research programs in this country and Europe have proven that community programs that combine media campaigns, counseling, screening, comprehensive school health programs, and environmental changes do lower risk of cardiovascular and other chronic diseases. The challenge for the 1990's is to work with States and communities to adapt these interventions to other chronic diseases and to the needs of blacks, Hispanics, Native Americans and low-income populations. If we apply what we already know, we will see major decreases in uncontrolled high blood pressure, high cholesterol, stroke, and breast and cervical cancer deaths by the Year 2000.

One of the hallmarks of the 1980's was the recognition that motor vehicle fatalities, homicide, suicide, and other types of injury are important priorities for the public health community, and that proven public health interventions can be used to reduce their terrible toll on our society. One in four U.S. residents sustains injuries each year. The total lifetime cost of injuries sustained in 1985 was $158 billion. Over the last 5 years, we have delineated many of the causes of injury, identified important risk factors such as alcohol use, and tested ways to prevent not only injuries but also the disability that results from them. Our task for the 1990's is to build the teams from public health, transportation, law enforcement, and other fields that are needed to achieve dramatic reductions in injuries and deaths due to falls, drownings, motor vehicles, homicides, and suicides.

The Institute of Medicine report on The Future of Public Health makes it clear that these are just a few of the challenges facing public health during the next decade. This report, published last year, emphasizes the need to strengthen the ability of state and local health departments to cope with this broad and complex array of prevention issues. A strong and efficient network of public health agencies--Federal, State, and local, working with their private sector partners--is the foundation for effective prevention programs in the 1990's.

CDC's FY 1991 Budget Request

Bearing in mind this portrait of public health in the 1990's, I would like to share with you a few of the highlights of the FY 1991 budget for the Centers for Disease Control.

Infant Mortality Initiative

Certain factors increase the risk of low birth weight and infant death. Maternal smoking doubles the risk of low birth weight and accounts for 10 percent of infant deaths. However, one in four women in the United States smokes during pregnancy. CDC has implemented a very successful Smoking Cessation in Pregnancy program in three States. More women in the program are quitting than originally expected--at a 6 percent higher rate than that of control patients. We have helped several States conduct epidemiologic analyses of their infant mortality problems. For example, in Mississippi, a comprehensive perinatal plan was developed and endorsed by the State legislature, and improved management of family planning clinics reduced the average waiting period for care from 105 to 6.3 days. These activities, along with related efforts of other public health agencies, resulted in a 28% decline in infant mortality between 1980 and 1986 in Mississippi, compared with a decline of 18% in the southeast region as a whole.

As part of the Secretary's overall effort to reduce infant mortality, our FY 1991 budget includes an increase of $11.5 million for the Infant Mortality Initiative. These funds are included in our "Epidemic Services" budget activity. With this increase, we will expand State-based surveillance systems that collect data on maternal nutrition, cigarette and alcohol use, and access to maternity and well-child care. We will also be able to assist States in adopting smoking cessation programs for high-risk, low-income pregnant women.

Human Immunodeficiency Virus Prevention

HIV infection prevention and control continues to demand our most innovative approaches and the involvement of a broad network of health and education agencies as well as national, regional, State, and community organizations. A few examples of CDC's accomplishments are:

- To serve racial and ethnic minority populations which are disproportionately affected by HIV, CDC directly supported 64 minority and other community-based organizations for education and prevention activities in the 27 metropolitan areas with the highest number of reported AIDS cases.

- To prevent HIV infection in the workplace, CDC developed and disseminated "Guidelines for the Prevention of Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Health-Care and Public-Safety Workers" and "A Curriculum Guide for Public-Safety and Emergency-Response Workers."

- CDC supported HIV/AIDS prevention and surveillance programs in 63 States, cities, and territories. From 1985 through September 30, 1989, an estimated 2.2 million HIV tests were performed in public sites. Of those tests, 6.2% were positive. Important efforts in counselling both seropositive and seronegative individuals were associated with each testing procedure.

- With CDC support to State and local departments of education, virtually every State department of education in the country provided teacher training programs to teach students about HIV. For example, over 12,200 teachers, school administrators, school board members, and parents were trained through six AIDS regional training centers established by the New York State department of education.

- Since October 1987, CDC's National AIDS Public Information Campaign secured over $36 million in free public service television airtime.

CDC's FY 1991 budget requests $509.1 million for programs to control HIV infection, an increase of $66.3 million over FY 1990. Increases in the 1991 HIV prevention budget are directed primarily to examining potential occupational HIV infection acquisition and transmission in high-risk health care delivery and public safety settings; evaluating HIV counseling and testing approaches and outreach HIV prevention efforts directed to intravenous drug users; preventing HIV transmission among women and infants; and expanding HIV-related laboratory training and quality assurance.

Preventing Infectious and Chronic Diseases

- In 1989, the number of cases of primary and secondary syphilis reached the highest level of the last 40 years. Congenital syphilis has also skyrocketed, after reaching an all-time low in 1980. An important contributor to this dramatic escalation has apparently been the exchange of sex for drugs, especially crack cocaine. Intensive efforts have resulted in reversals of the climbing syphilis rates in Florida and California, and similar results are expected for Georgia and Illinois. In 1990, CDC is targeting the 35 counties in the United States with the largest number of early syphilis cases for intensified prevention efforts. CDC's FY 1991 budget includes $81.4 million for prevention and control of sexually transmitted diseases.

- Tuberculosis persists as a global health problem of enormous dimension, with about 8 million new cases and 3 million deaths occurring each year. In the United States in 1987, 22,517 cases were reported. However, tuberculosis is a preventable disease. There are three reasons why elimination of this disease is now feasible: (1) tuberculosis now occurs mostly in well defined geographic and demographic pockets where it can be treated cost-effectively; (2) the revolution in biotechnology can potentially generate new diagnostic, therapeutic, and preventive tools for combatting this disease; and (3) the use of new communication technology can accelerate the transfer of prevention applications into practice. CDC's FY 1991 budget includes $8.4 million for tuberculosis grants to States and about another $2.3 million in research and technical assistance.

- Immunization programs continue to challenge public health leaders. In 1989, more than 16,000 cases of measles were reported--more than five times the number reported for 1988. Tragically, 43 Americans--including 31 children under 12 years old--lost their lives to this totally preventable disease. In most States, immunization coverage against childhood diseases by age 2 is believed to range only between 70 and 80 percent and is lower in some large metropolitan areas. Although 33 percent of the reported measles cases occurred among children under 5 years old, almost 50 percent occurred in high school and college-aged youth, most of whom were vaccinated as children.

Hepatitis B virus also causes 300,000 new infections and 6,000 deaths each year. A new, aggressive immunization strategy includes universal screening of pregnant women and immunization of infants born to infected mothers, as well as immunization of persons in high-risk groups.

In FY 1991, CDC requests $152.7 million for immunization programs, a net decrease of $2.1 million from FY 1990. This request maintains the 1990 appropriations program level in all areas except the vaccine stockpile. Included is $7.9 million to improve delivery of vaccines to infants and toddlers in inner cities, $10.4 million for measles outbreak surveillance and control, and $10.4 million to reduce perinatal transmission of hepatitis B through public sector screening and immunization programs.

- Lead poisoning of young children is a continuing problem in this country. In 1984, 3 to 4 million children in the United States had blood lead levels of at least 15 micrograms per deciliter. This amount of lead was previously thought to be harmless, but is now known to cause adverse neurobehavioral effects, intellectual impairment, and loss of hearing. Since the early 1970s, CDC has provided leadership in the prevention of lead poisoning in young children. CDC is working with other Federal, State, and local agencies to develop lead elimination strategies. Our FY 1991 budget continues the 1990 level of $3.9 million for childhood lead poisoning prevention programs in areas with the highest prevalence.

- Breast cancer accounted for over 40,000 deaths in 1989 and cervical cancer for over 6,000 deaths. CDC currently assists nine States and the Indian Health Service to target these two cancer killers through programs designed to promote early detection and thus better survival rates for women. In 1990, CDC is supporting the development of comprehensive up to five State-based breast and cervical cancer mortality prevention programs, with priority emphasis on high-risk, underserved populations. These programs will serve as a foundation for a strong national program to prevent breast and cervical cancer. Our FY 1991 budget requests $4.9 million to continue these programs.

- Occupational injuries occur at twice the rate of injuries in the home. Data on work-related injuries pinpoint farming as the second most dangerous occupation in the country, after transportation work. To aid the 9 million farm workers and their families who bear a disproportionate share of injuries and illness, CDC is leading the development of a system to prevent farm-related injuries and diseases. In addition, CDC will sponsor a Surgeon General's conference to exchange information, build consensus, and maximize collaboration in this effort. In FY 1991, CDC is requesting $85.1 million for occupational safety and health research, training, and prevention programs, which includes $11.4 million to continue these farm safety and health programs. As previously discussed, CDC also supports research and develops interventions to prevent injuries in non-occupational settings. The budget requests $22.7 million for those efforts in FY 1991.

- In 1989, 83 major investigations were conducted by Epidemiologic Intelligence Service officers both nationally and internationally, and approximately 500 disease outbreaks were investigated by officers assigned to State and local health departments. A notable example is the investigation of eosinophilia-myalgia syndrome (EMS) which was associated with taking nutritional supplements containing L-tryptophan. To better define and assess the extent of this syndrome, CDC and State health departments implemented a national State-based surveillance system. The Food and Drug Administration alerted the public to refrain from using products in which L-tryptophan is the sole or major component. As of January 26, 1174 EMS cases and 12 deaths were reported to CDC from all 50 states, the District of Columbia, and Puerto Rico. Another example is the discovery of Ebola fever virus in imported monkeys. This virus has caused epidemics of hemorrhagic fever with high mortality rates in Africa, but previously had never been found in this country. Immediately after the discovery, along with the State health departments and the Army, CDC established a quarantine, set up surveillance, and began the investigation. The FY 1991 Budget requests $56.7 million, in addition to the funds for the Infant Mortality Initiative, for epidemic services.

- CDC has a major responsibility for assessing the health of the Nation and dedicates substantial resources to systematically collecting, assembling, analyzing and distributing information. New vital statistics records for births and deaths were implemented across the country in 1989. The new birth certificates call for reporting on tobacco use, alcohol use, and weight gained during pregnancy. Researchers tackling infant mortality will be able to examine the association of infant mortality with a number of important variables, such as low birth weight, maternal age, and prenatal care, and to determine whether these associations are changing over time.

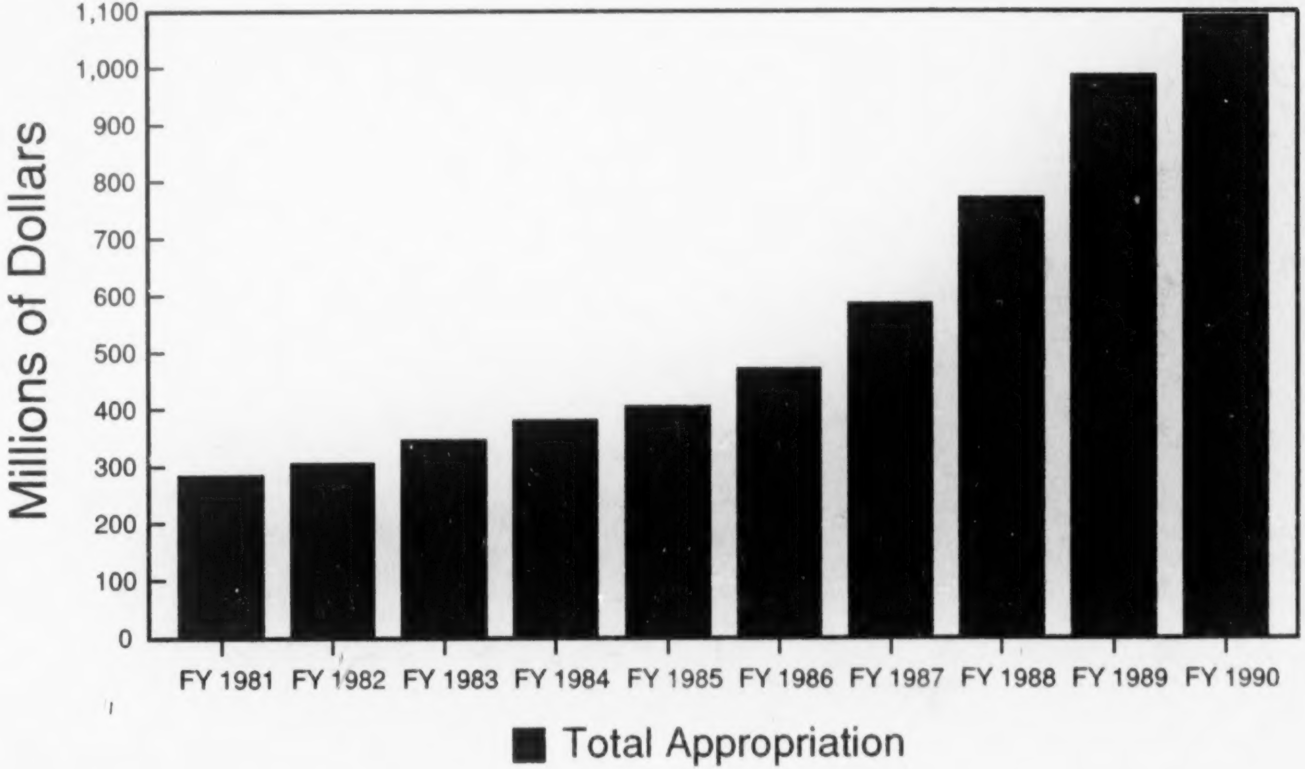
The Health Promotion/Disease Prevention Supplement to the 1990 National Health Interview Survey will collect a wide range of data to evaluate the progress of the 1990 Objectives for the Nation and will use computer-assisted interviewing technology to speed access to data by users throughout the Public Health Service (PHS) and other researchers. CDC successfully conducted field operations for the second year of the third National Health and Nutrition Examination Survey, the most extensive health examination survey ever fielded, and conducted the National Health Care Survey. These two surveys will provide important data for setting baselines and monitoring the National Health Objectives for the Year 2000. CDC's FY 1991 budget for health statistics includes $48.1 million in appropriated funds plus $19 million transferred from PHS evaluation funds.

Many of CDC's buildings and facilities have reached an age of 30 years without having had major maintenance or repair. The CDC FY 1991 request includes $7.9 million to fund the more critical of the projects required to repair and maintain the condition of CDC's facilities.

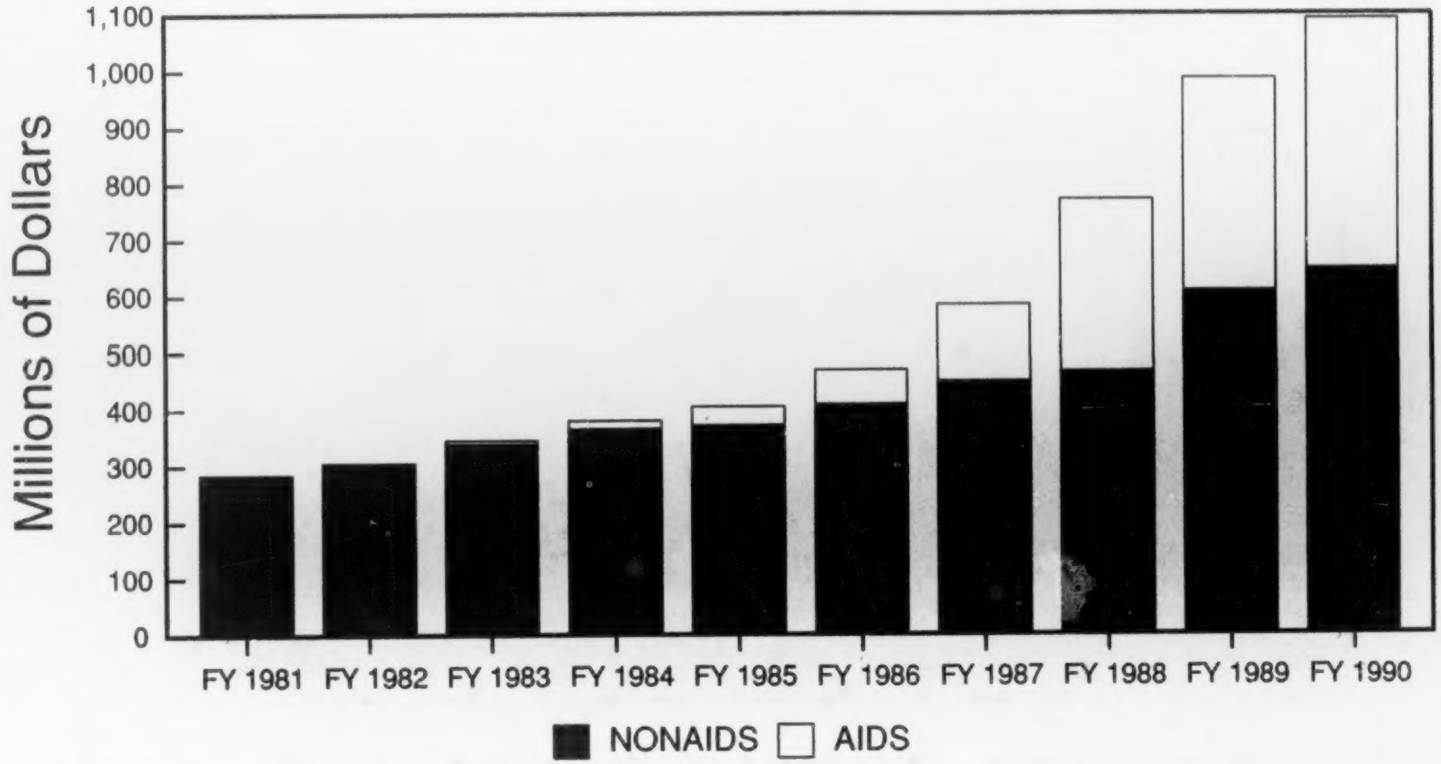
Developments in scientific technology and innovative applications for disease prevention, and of course, our own talented and dedicated workforce, make us very optimistic about CDC's ability to meet the challenges of the 1990's.

Mr. Chairman, with your support for this budget request of $1,171,755,000, we will continue to provide leadership to the challenges of preventing disease, injury, disability, and improving the quality of life for all Americans.

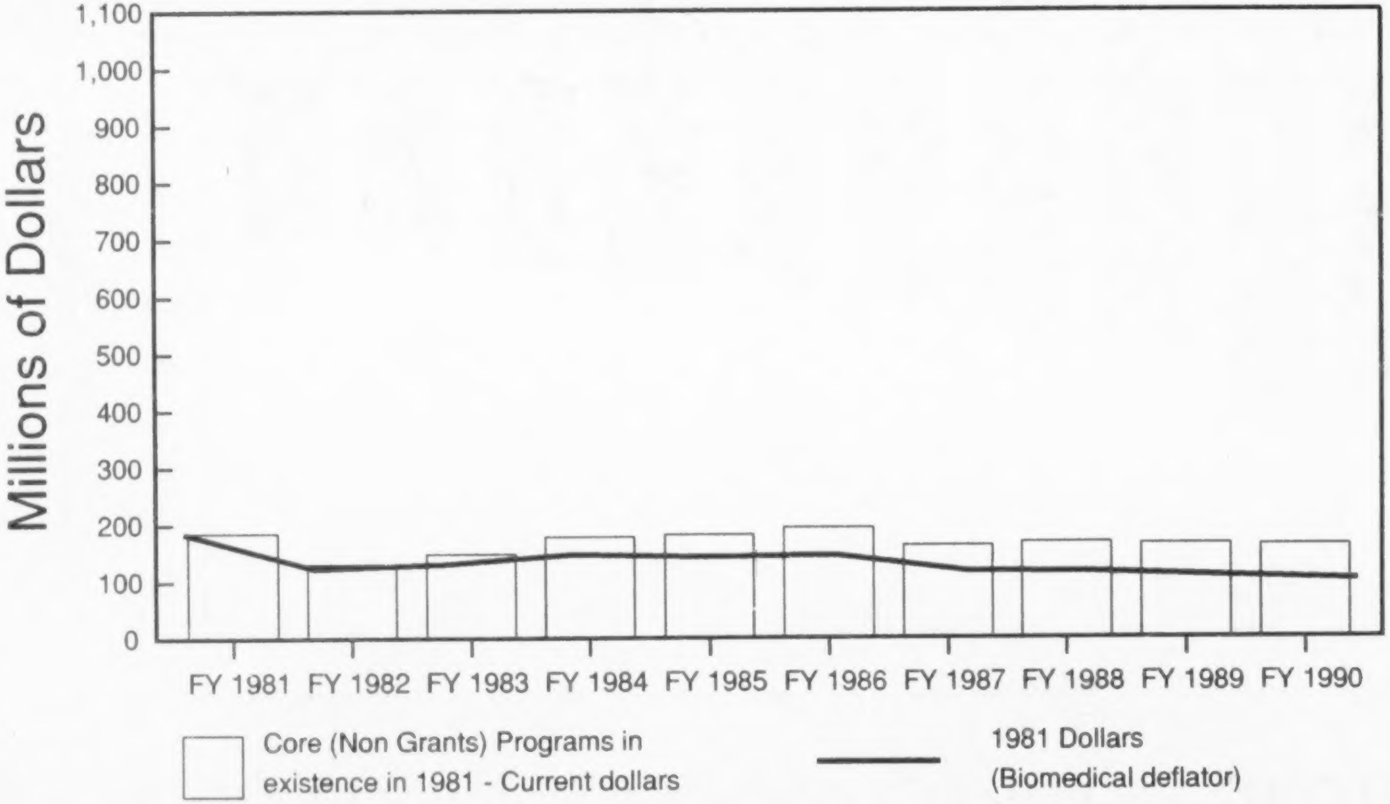
Centers for Disease Control Funding



Centers for Disease Control Funding



Centers for Disease Control Core Budget



MANAGEMENT CHANGES

Mr. NATCHER. Thank you, Dr. Roper.

You have been on the job now only a few weeks. Tell us, if you will, at this point do you plan to make any significant changes in the way that CDC is managed or operated?

Dr. ROPER. I don't think so, Mr. Chairman.

My three weeks on the job have convinced me that CDC is in very good shape, and I don't plan any major changes at this time.

AGENCY OBJECTIVES

Mr. NATCHER. Do you have two or three major objectives that you hope to achieve in the coming year?

Dr. ROPER. Yes, sir, and I have already alluded to the first of them, but let me describe it again.

I believe that it is time we looked carefully at the basics, what has come to be called in other areas, the infrastructure of our public health system, state and local health departments, but also the infrastructure of CDC and the federal effort in prevention.

I think there is much to be done in looking carefully at how well we are positioned to deal with problems that we don't even know about that are going to appear on the horizon.

A second area of importance and one that I hope to put personal attention on is the whole area of prevention.

CDC is the prevention agency of the Federal Government. There are things that we know to do that we can do better in the field of prevention.

In a word, I would like to help us move from giving speeches about prevention to making prevention a reality in America, to build on the important work that many others have done in this field.

And then the third area that I want to give attention to is the broad area of investing in the health of our children.

I am a pediatrician and would like to be helpful in a variety of ways to strengthen our best resource for the future, that is our Nation's children and their good health.

VACANCIES

Mr. NATCHER. Are any of the top positions in the agency currently vacant, any of them?

Dr. ROPER. No, sir.

PUBLIC HEALTH WORLDWIDE

Mr. NATCHER. Dr. Roper, I believe the Centers for Disease Control started sometime back in the 1940s; isn't that right?

Dr. ROPER. Yes, sir, 1946.

Mr. NATCHER. 1946. Since Mr. Conte and I and Mr. Stokes and Mr. Dwyer and Mr. Pursell have been on this subcommittee, we have tried every year to appropriate as much money as we can for health and human services, for the health of our people.

From time to time, Dr. Roper, I hear people criticize the amounts that are appropriated to certain departments in the government due to the fact that they say we are appropriating a lot of money, but we don't know what is happening around the world as far as health is concerned.

In the Centers for Disease Control during the year, do your people travel much? Do you have any meetings with those from abroad to try to ascertain what is taking place as far as public health is concerned?

In the field of public health, what do you know about what is going on around the world?

I understand you have only been there for a few weeks, but what are we doing about it, Dr. Roper?

Dr. ROPER. I think the United States has a number of activities; indeed, CDC has a number of activities under way in collaboration with the World Health Organization, which is a part of the United Nations. We are involved with all of the health efforts in this country, and interact with many other governments in the area of health.

I would just like to mention a few of them, but make the point at the outset that this is a part of CDC's efforts that I would like to strengthen and enhance.

It seems to me that improving the health of the world is something that is obviously worthwhile doing, and it also allows us to be seen—to be doing the right thing.

It is good for us in foreign policy terms, if I may say so.

One of the activities that we have under way is assisting a number of governments to put in place within their countries a system of epidemic control and surveillance that we have developed so marvelously in this country through CDC. This global epidemic intelligence service effort that we now have is a shining example of what we can help other nations achieve and we have done this in six nations around the world.

A second example of our activities is assisting the United Nations through the High Commissioner for Refugees in refugee health around the world. We have a number of activities in that area such as fighting the epidemic of AIDS, particularly in Africa. Many CDC employees have spent time in Africa researching particular activities.

In a variety of activities that we are involved, we can do more and want to do more, consistent with our ability and our resources.

I think it makes good health sense and good foreign policy sense for us to be involved in this area.

SES POSITIONS

Mr. NATCHER. Now, Dr. Roper, for the record, provide a listing of the agency's senior executive service jobs by job title.

Dr. ROPER. I will be happy to.

[The information follows:]

SENIOR EXECUTIVE SERVICE POSITIONS BY JOB TITLE

Deputy Director.
Assistant Director for Public Health Practice.
Assistant Director for Management.
Director, Office of Program Support.
Director, Office of Program Planning and Evaluation.
Assistant Director for Science, National Institute for Occupational Safety and Health.

Deputy Director, Center for Prevention Services.

Deputy Director, Center for Environmental Health and Injury Control.

Director, Division of Environmental Health and Laboratory.

Sciences, Center for Environmental Health and Injury Control.

Director, Center for Infectious Diseases.

Associate Director For Laboratory Science, Center for Infectious Diseases.

Director, National Center for Health Statistics.

Deputy Director, National Center for Health Statistics.

Associate Director For Research and Methodology, National Center for Health Statistics.

Associate Director, Office of Program Planning, Evaluation, and Coordination, National Center for Health Statistics.

Associate Director, Office of Vital and Health Statistics.

Systems, National Center for Health Statistics.

Associate Director For Analysis and Epidemiology, National Center for Health Statistics.

Deputy Director, Center for Chronic Disease Prevention and Health Promotion.

COMMISSIONED CORPS

Mr. NATCHER. Also for the record, tell us how many commissioned cops officers the agency has by grade level. Place that in the record for us.

[The information follows:]

COMMISSIONED CORPS

The total number of Commissioned Corps employees employed by the Centers for Disease is 681. We have 8 ranks at CDC with the following number of Commissioned Corps employees in each rank:

CO-1	0
CO-2	6
CO-3	53
CO-4	219
CO-5	224
CO-6	172
CO-7	4
CO-8	3
Total	681

PAY INCREASE

Mr. NATCHER. What is the cost, Dr. Roper, of the recent federal pay increase for the agency in fiscal year 1990, and how are you absorbing that cost?

Dr. ROPER. $6,679,000, sir.

Mr. NATCHER. How are you absorbing it?

Dr. ROPER. We are reducing our expenditures in the area of capital equipment in order to be able to absorb the cost of the pay raises.

Mr. NATCHER. Will you be required to absorb part of the cost of the proposed pay increase in 1991?

Dr. ROPER. We will have the resources to pay for half of the pay raises, about $3,250,000, and we will have to absorb about $3,250,000 of the $6,500,000 that will be in 1991.

How will that take place?

Mr. NATCHER. How would you absorb that?

Dr. ROPER. Through a similar kind of effort.

We will forego some expenditures internally in the scientific area.

GRH SEQUESTER

Mr. NATCHER. The agency incurred a 1990 sequester under Gramm-Rudman-Hollings of $14,217,000, along with the salaries and expense reductions of $1,553,000.

How are you coping with these reductions, Dr. Roper?

Dr. ROPER. What we have done is look across our budget and applying a general decrease across programs to accomplish the sequester amount.

REPROGRAMMING REQUEST

Mr. NATCHER. The justifications on page 11 indicate that a 1990 reprogramming request is in the works.

How much is involved here, and what is the purpose for the reprogramming, Dr. Roper?

Dr. ROPER. It is a request to reprogram $1,400,000 to support activities at the National Center for Health Statistics. It is a reduction in funding that was in one of our Immunizations programs for parent/patient notification; we believe we can do more efficiently the same activity that the Congress intended and, therefore, this reprogramming makes good sense, we believe.

Mr. NATCHER. When will it be formally submitted to the committee?

Mr. WILLIAMS. Mr. Chairman, the reprogramming is currently pending at the Office of Management and Budget, and it should be coming up shortly.

FY 1991 BUDGET REQUEST

Mr. NATCHER. Going back again to the matter of the reductions there brought about as a result of Gramm-Rudman-Hollings, how much, Dr. Roper, of the 1990 reductions were restored in the 1991 request?

Do you have any restoration here in the 1991 request before the committee?

Dr. ROPER. About $5,000,000 of the sequester amount was restored in the 1991 budget in the area of HIV and NCHS. That is one function that was restored.

Mr. NATCHER. What portions of your 1991 request are not currently authorized for 1991? What programs are involved?

Dr. ROPER. Immunization grants, vaccine, stock pile, tuberculosis, grants, injury control and health statistics.

Mr. NATCHER. All need authorizations?

Dr. ROPER. Yes, sir.

Mr. NATCHER. The activity structure of the 1991 budget is somewhat different, as you know, from what Congress approved in 1990.

You have deleted the separate line items for lead poisoning, TB grants, and injury control.

Why was this done, Dr. Roper?

Dr. ROPER. I believe, Mr. Chairman, it was a desire to simplify the budget, and the way it was displayed——

Mr. NATCHER. That is the reason why you have depleted the separate line items?

Dr. ROPER. Yes, sir.

Mr. NATCHER. All right.

Mr. Conte, I yield to you.

Mr. CONTE. Thank you, Mr. Chairman.

Dr. Roper, it is, indeed, a special pleasure to welcome you before our committee today. You have an outstanding record in public service. It is a delight to all of us on the committee that you chose to man the helm of CDC.

Dr. ROPER. It is a delight to me to be asked to do it, sir.

LYME DISEASE

Mr. CONTE. I wish you all the best down there in Atlanta.

Our only regret is that the Braves don't play the Red Sox. Maybe we can get Ted Turner to change that.

Since its recognition in 1975 as an isolated problem in Connecticut, Lyme disease has emerged as a major national public heath problem. And during 1989, more than 7400 cases were reported from 46 states.

The incidence of Lyme disease has increased over 15 times of what it was in 1982. With the $2,000,000 this committee provided last year, what is the CDC doing to control the spread of Lyme disease?

Dr. ROPER. We are devoting our efforts in Lyme to four major areas.

One is standardizing the reporting across the country through a national surveillance program, so we are certain that we have similar information coming in from all of the states.

Second, we are developing and standardizing new Lyme disease diagnostic tests to better enable laboratories to run tests for Lyme disease.

Third, we are pursuing a series of studies, epidemiologic studies, of Lyme disease in the United States, and then fourth, we are developing more effective strategies for prevention and control of Lyme disease and of the tick that transmits Lyme disease.

Mr. CONTE. What has accounted for this rapid spread of Lyme disease?

Dr. ROPER. The spread of the tick and of the bacterium that the tick harbors, that is—that causes the disease. It is spreading outside of New England to other parts of the country.

We believe that some of the increase, though it is hard to say at this point, is still due to doctors recognizing a disease that formerly went unrecognized, because through your efforts and others, we have been able to publicize just what Lyme disease is, and enable practicing physicians across the country to diagnose it.

There are a number of publications that CDC has put out through our Morbidity Mortality Weekly Report on Lyme disease. The MMWR goes to many physicians around the country. Also, there is a publication that Pfizer, one of the pharmaceutical companies, has put together. This kind of effort is essential in enabling the health care community to recognize this problem and to assist others in dealing with the problem.

Mr. CONTE. In your professional judgment, how much more is required and what will you do with additional funds—for additional measures, I should say, which are needed to combat Lyme disease?

Dr. **Roper**. We believe that the effort that we are pursuing right now is the appropriate effort. If we have additional resources, we will do these same sorts of things, but at a greater level.

But we believe that the current level is about right for Lyme disease.

Mr. **Conte**. Are you working on any kind of an ointment or lotion to put on your body when you go out there in the woods that works, like a mosquito repellant?

Dr. **Roper**. Well, one of the best things that can be done in the area of Lyme disease, as you point out, is to prevent the ticks biting people so that the disease is totally prevented.

That is done by wearing the right kind of clothing when you go out in areas inhabited by this tick. Another thing that can be done is the use of repellants.

We are looking at whether new and better insect repellants, particularly tick repellants, can be used in the future, so, yes, sir, we are working on that.

Mr. **Conte**. I spend a lot of time out in the woods and the forests and streams, and I would think that this is one area that really ought to be concentrated on. Very difficult on a warm day to bundle up, and you are never going to cover your face and your hands unless you wear gloves in the summertime, but I think a repellant would be the way to go on this thing.

And the other thing is to work on a spray that can kill the ticks, because they are spreading. You got deer moving from state to state, and that is how it is spreading all over the country.

Dr. **Roper**. One of the most important things is getting the word out to individuals to make sure they look for these ticks after they come in from the woods. They are very small, hard to recognize, and still, it is important to try to find them before they——

Mr. **Conte**. I know, I have seen them.

Dr. **Roper** [continuing]. Cause the problem.

Mr. **Conte**. They can be on you for a couple of days and you don't even know it.

Dr. **Roper**. That is right.

DISABILITIES PREVENTION PROGRAM

Mr. **Conte**. In fiscal year 1988, with funds that were provided by this committee, CDC began the disabilities prevention program to address the need for a national program to reduce primary and secondary disabilities.

I have a bill which would authorize up to $20,000,000 in fiscal year 1993. I testified on behalf of this bill before Mr. Waxman's committee a few days ago.

The national cost of disabilities is staggering. Over $120,000,000,000 a year, 15 percent of the people over the age of 16 have a disability.

What does CDC plan to do in this area in the coming year? And in your professional judgment, what more needs to be done?

Dr. **Roper**. Well, I believe you have chosen an important topic to pursue.

The prevention of disabilities is an important national agenda item. As you know, the Congress is currently debating legislation in the area of disabilities, in addition to the program for which you are seeking authorization.

We are currently spending about $4,500,000 in our disability prevention program. The prime thing that we are seeking to do is we have asked the Institute of Medicine of the National Academy of Sciences to study this issue and develop a proposed national agenda for disabilities prevention.

We should have that report from the Institute of Medicine this summer, and we will be in a better position, having had their expert advice, to tell you just what further needs to be done.

But I share your interest and concern in this area, and, in fact, just yesterday in Atlanta I met with Mrs. Sandy Perrino, who is the chairwoman of the National Council on Disability, and we are operating our disability prevention program in partnership with the National Council.

This is a far-reaching activity, one that I think that has real potential for the future.

Mr. CONTE. Are you working with the states, too, to try to get them going on this?

Dr. ROPER. Yes, sir.

Again and again in CDC's work, what we do is set up a national program that encourages the states to set up programs within their states, and, yes, we are doing that.

INTERNATIONAL HEALTH EMERGENCIES

Mr. CONTE. With the growing use of famine and disease as a weapon of war in regional conflicts around the world, millions of innocent people have uselessly suffered and died from deliberate pestilence and neglect. This committee is well aware of the outstanding jobs CDC has done in responding to the requests for humanitarian assistance in all kinds of health-related disasters, ranging from assessing the Bhopal tragedies in India to developing control strategies for epidemics of yellow fever in Nigeria, and hemmorhagic fever in Brazil.

Dr. Roper, what is CDC currently doing in the area of international medical emergencies?

Dr. ROPER. The two principal activities we have under way are through the State Department and the United Nations.

The first is a memorandum of agreement with the State Department's Bureau of Refugee Programs where we have one CDC epidemiologist supplied through the State Department to investigate epidemics, establish health information systems, and do a number of health and nutrition assessments in countries overseas.

A second activity we have is through an agreement with the United Nations' High Commissioner for Refugees. UNHCR is the international agency that provides emergency assistance to refugees around the world.

In the last two years, personnel have assisted in research and assistance in Ethiopia, Somalia, Sudan, Malawi, and Pakistan.

As you point out, the problem of refugees, both those who have crossed borders and those within their own country who have been displaced, is a major international problem, and it is one that we think needs further attention.

Mr. **Conte.** I understand you have no full time personnel devoted to coordinating emergency response; is that correct?

Dr. **Roper.** We have personnel that spend part of their time doing that, but that is right, we don't have full time personnel devoted to that effort.

Mr. **Conte.** What is the outlook for the global problem of displaced persons and refugees?

Dr. **Roper.** Well, it is hard to deal with this problem in isolation, because some are displaced because of wars, civil and international and others because of economic problems.

I am hopeful that as we deal with problems of international conflict and growing economics around the world, we will be able to diminish the problem of refugees.

But right now, millions of people around the world are living in refugee camps, which are surely not the best circumstances for their health and well-being.

Mr. **Conte.** Thank you, Mr. Chairman.

Mr. **Natcher.** Mr. Stokes, I yield to you.

Mr. **Stokes.** Thank you, Mr. Chairman.

Dr. Roper, I welcome you before the subcommittee. It is a pleasure to welcome you here.

Dr. **Roper.** Thank you, sir.

MINORITY HEALTH

Mr. **Stokes.** Doctor, in your formal testimony you make a couple of rather pointed statements. Let me refer to them.

On the first page you say, "Public health faces serious challenges in the 1990s. Infant mortality remains a serious national concern, as the United States has fallen from seventh to 22nd among developed nations in its infant mortality rate over the last two decades. The problem of infant mortality is particularly acute for black infants, who continue to experience twice the risk of infant death and low birth weight than do white infants."

Over on the following page you say to us, "Heart disease, cancer, stroke, and diabetes are examples of health conditions that are preventable. Yet we have not applied all that we know to reduce them, particularly among minority groups."

Doctor, I am 65 years old. When I was just a young boy, tuberculosis was prevalent in the community in which I grew up. In fact, my brother, who is two years younger than I was sent away at that time to what they called a TB camp until such time as it was arrested.

I have seen now that TB now continues to disproportionately impact racial and ethnic minorities. About two-thirds of all cases occur in minority populations. In 1988 compared to non-Hispanic whites, the risk of developing TB in blacks was seven times higher.

Doctor, tell us about this and why, in all these areas where you tell us these things are preventable, minorities still continue to suffer all these diseases and die at a disproportionately higher rate compared to white Americans?

Dr. **Roper.** You put your attention sir, on one of the major national health problems we face, and, as you know, Secretary Sullivan has taken that on as one of his central priorities.

We have embarrassingly high infant mortality rates in this country, and, indeed, we have embarrassingly high rates of disease and disability generally among minority populations. It is a problem that we just have to solve.

How to do that is a complicated matter, but I believe that in each of these areas what it requires is dealing with both the health problem itself and the underlying problems that may lead to those problems.

Many of the disproportionate illnesses in minority populations are due to problems of poverty, a lack of health care resources, and a variety of things related to living conditions and other issues well beyond tuberculosis itself as a public health issue. We have got to be attacking the broader array of problems.

But I think there is a role, a central role that CDC in its programs through state and local health departments, and voluntary organizations, can play in trying to bring the best we know about preventing disease to minority populations.

I think it requires our looking at these problems in new ways and coming up with innovative solutions.

One of the things it requires is that we have people as a part of CDC who are themselves from minority populations, so that they can understand—help us understand how to bring these programs to all Americans. We are actively pursuing those endeavors.

Mr. STOKES. Well, just let's take this discussion a little bit further.

What is the total amount of your budget?

Dr. ROPER. $1,200,000,000, essentially, for next year.

Mr. STOKES. $1,200,000,000?

Dr. ROPER. Yes, sir.

Mr. STOKES. And what percentage of the $1,200,000,000 would you say is targeted towards minorities?

Dr. ROPER. I would be happy to give you a more precise answer for the record, but I would be willing to say it is at least half of that, because most of what we are doing is directed at problems of health that are disproportionate in their impact on minority populations.

Mr. STOKES. But you wouldn't say half of that $1,200,000,000 is devoted to these minority programs; would you?

Dr. ROPER. Yes, sir.

To explain, there is not half of the $1,200,000,000 in programs that are minority programs, but as you said in your testimony, two-thirds of tuberculosis is among minority populations, and so our tuberculosis control program is directed squarely at dealing with tuberculosis in minority populations.

So a lot of what we do well beyond the categorical minority health programs, is directed at minority health problems.

Mr. STOKES. How would you then account for the continued disparity between minorities and the majority population, if you are expending this kind of money? You don't have any results to show for it.

Dr. ROPER. Well, we do have results, but we haven't been smart enough and we haven't done well enough so far.

The problems we have are essentially those of improvements that have not been shared across the population generally. It is not primarily a problem of health problems getting worse in minority populations, but rather minorities haven't enjoyed the same improvements as the rest of the population.

EBOLA VIRUS

Mr. **Stokes**. Doctor, this morning's Washington Post carries a story about having the New York State Health Department placed restrictions on the importation of monkeys into this country yesterday. This was done because of the fear of the Ebola virus.

What can you tell us about this virus? What threat does it pose?

Dr. **Roper**. All right, sir.

Ebola virus is a virus that we have been researching carefully for a number of years, and researching intensively over the last six months.

Last fall we discovered that two monkeys in a research animal facility in this country were infected with Ebola virus.

We have done a series of studies that lead us to believe that Ebola infection, or Ebola-like infection, we are still determining the exact nature of this virus—is present in a number of the monkeys that were brought into this country for research purposes.

We are concerned about the hazard that may pose to workers in facilities that are involved in the importation and use of monkeys in this country. That is why last Thursday I sent a letter to all of the importers of cynomolgus monkeys, the principal variety of monkeys that we are concerned about.

In that letter I said that they had to follow specific regulations in the care of their monkeys, and that we would be inspecting them to see whether they were following those regulations.

Our people were out in the field doing those inspections early this week, and we found some problems, and yesterday I sent letters to three of the facilities notifying them that we were revoking their ability to further import monkeys into this country, effective immediately, until they came into compliance with our requirements.

The nature of the hazard to the general public is very, very low, if not zero. The hazard that we are concerned about is to workers in these facilities, and that is where our attention is directed, to make sure that the practices that are ingrained in facilities handling monkeys are such that they are safe and do not endanger the workers.

Mr. **Stokes**. Thank you.

Thank you, Mr. Chairman.

Mr. **Natcher**. Mr. Pursell?

Mr. **Pursell**. Thank you.

Dr. Roper, nice to have you back here in a different role.

Dr. **Roper**. Thank you, sir.

Mr. **Pursell**. Up to the White House and then up to CDC, you are going in the right direction.

Dr. **Roper**. I agree, and with all due respect, headed south is the right direction, too.

INFANT MORTALITY

Mr. **Pursell**. I have always appreciated your leadership, close-in communication to Members of Congress and the committee.

Infant mortality that Louie Stokes brings up is a real serious issue in our state of Michigan and all over the Nation, and our rate is increasing. You spoke about it in your earlier printed remarks also.

We have a particular county in my district that I have spent a lot of time back home creating a structural infant mortality clinic, with OBSs and nurses and research component in order to bring down a serious rate in a particular county, but I don't see any national initiatives or any direct line earmarked funds for infant mortality, and you say we are doing a lot of talking about preventative health and in that area.

But what could you suggest to Congress beyond your role even as CDC Director that we address this so that there are demonstration grants and eventually a strong program nationally to address a serious national issue?

Dr. **Roper**. It is, indeed, a serious national issue, one the President recognizes and Secretary Sullivan does surely. That is why the President's budget has a series of activities directed to infant mortality.

The one that features CDC is an $11,500,000 request targeted at building our information systems to better characterize just what the problems of infant mortality are, and also to assist states in carrying out programs to encourage women not to smoke and to stop smoking while they are pregnant. One of the major problems contributing to low birth weight and infant mortality is women smoking during their pregnancy.

Mr. **Pursell**. How much does your center get for infant mortality efforts, the bottom line figure?

Dr. **Roper**. This new program is $11,500,000. The total is $70,804,000, so we are requesting a major expansion this year.

Mr. **Pursell**. Are there other institutes and other components in HHS who really don't have a real focused strategy?

Dr. **Roper**. Well, we are working on that.

When I was at the White House, I worked with Dr. Jim Mason, who is the Assistant Secretary for Health. He now chairs a task force on infant mortality under the Domestic Policy Council that is producing what you are asking for, a coordinated report on infant mortality and a series of activities that can be engaged in.

Principally, the report will be directed at bringing into application things that we know to do right now.

As I indicated in my answer to Mr. Stokes earlier, there are a number of things that we know to do and can be done, provided we target our resources better, not a scattered approach, but a directed approach to the problem.

CHRONIC DISEASE PREVENTION

Mr. **Pursell**. Okay.

And since you brought it up, the word "targeting," I would like to address a couple of pages out of your CDC manual that would go to each of the states, copies of which we all have here at our desk.

Dr. ROPER. Yes, sir.

Mr. PURSELL. I have just distributed copies to you and our staff here.

Michigan is number one in chronic diseases. You list nine diseases. You rank all the states, and Michigan is number one. Illinois is ten. Kentucky is number five. Some of our committee members' states may be not as serious as my state.

So I think our state ought to be looking at targeting dollars in terms of prevention of chronic illnesses, but yet on another page in the same magazine—same document that you presented today—are grants that go to Michigan. Spending for AIDS prevention is $6,000,000. Spending for Chronic disease prevention is only $139,000.

Now, I think the AIDS money ought to be targeted to cities that have that serious problem, and we ought to be able to have some flexibility.

And I guess my question is can we get flexibility in the line item appropriations to the various public health departments so that we could target some of our effort towards our most serious problem in Michigan, which is leading the Nation in chronic deaths? Is that possible?

Dr. ROPER. Yes, sir, it is.

FLEXIBILITY IN FEDERAL SUPPORT TO STATES

You raised a larger issue, which is the degree to which federal support to public health activities in state and local health departments ought to be general support with flexibility given to state and local officials to chose how best to spend that money and whether it ought to be closely targeted federal support with accountability.

I used to be a local health director, and an assistant state health officer, and I know what the other side of this equation looks like, and, in general I'm for greater flexibility being given to state and local agencies.

Mr. PURSELL. What direction, what influence, has your agency put on public health in Michigan to have them sort of review and focus and take a look at our number one ranking, which I am not very proud of.

Dr. ROPER. With me today is Dr. Jeff Koplan who is the Director for our Center for Chronic Disease Prevention and Health Promotion, and he is working with state health departments to expand their efforts in chronic disease, generic programs of chronic disease, and also those of cancer, hypertension, heart disease, diabetes, arthritis and so on.

Mr. PURSELL. He is up against the same problem we have, so it just seems to me that in Michigan we ought to focus specific dollars on our number one serious issue in the state and put the AIDS money, not that we don't have some problems, we do, but put the big money in the various urban cities and other areas that have a serious AIDS problem, targeting, I guess I am saying, targeting is a major policy rationale for me.

Dr. Roper. You are right, and my serious answer to you is the greater flexibility you and your colleagues give us in your appropriation to CDC, the greater flexibility we can give to states and localities in their carrying out of programs.

Unfortunately, if I can be further candid, in recent years we have been heading in the opposite direction. I don't know whether you saw the charts I brought with me at the beginning of this hearing, but they show dramatic increases in CDC's budget over the decade of the 1980s, a budget that has grown really spectacularly,—show him the first chart.

That is CDC's budget, the decade of the 1980s. Anybody would say that is wonderful growth if you want a bigger budget.

The second chart shows that most of that growth went to HIV, and then the third one reflects the core programs that were there in 1980 and what has happened to them over the decade. They have been flat-lined and have actually declined in buying power over the period.

The more flexibility you can give us, the more flexibility we can give to others.

Mr. Pursell. All right. I would agree with that.

And I want to compliment you, too—thank you—your effort to look at prevention in early childhood, particularly in elementary school programs.

Public health systems are at the state level and the various counties, but there is really not a local network working with the school systems. Some have nurses and not a lot of teaching done in health, nutrition, exercise, and those areas, smoking.

I think the country may be a little ahead of our bureaucracy, but we really don't have a network in the community level to address the issues that you are trying to address.

Dr. Roper. Some states are better than others, and we are trying to encourage the states to go in that direction.

Building the network of official health and education agencies, and in giving them the information that they need, like the one you are talking about here, my home state, Alabama, they can use this information to develop programs in the schools and other environments to——

Mr. Pursell. Do you communicate with school systems generally in your distribution mailing list and so forth?

Dr. Roper. Yes, sir.

Mr. Pursell. Local educational agencies, or state level? Do they filter down, or do you go directly into the school system?

Dr. Roper. We principally deal through national educational organizations that disseminate the information to the local level.

Mr. Pursell. Okay.

Thank you, Mr. Chairman.

Mr. Natcher. Mr. Early, I yield.

Mr. Early. Thank you, Mr. Chairman.

Dr. Roper, it is always a pleasure to see you.

Dr. Roper. Thank you, sir.

BUDGET TREND

Mr. **Early**. Doctor, that last chart you showed us, when responding to Mr. Pursell, indicates that, with the exception of AIDS, the overall commitment to CDC is on the decline; doesn't it?

Dr. **Roper**. Yes, sir.

Mr. **Early**. Could someone hold up that last chart again?

Dr. **Roper**. To be clear, let me explain.

Mr. **Early**. Well, wait a minute.

The second chart showed the difference in red, which is AIDS. It is AIDS, right?

Dr. **Roper**. Yes, sir.

Mr. **Early**. Okay.

Now, the third chart displays everything budgeted excluding AIDS; is that right?

Dr. **Roper**. Excluding HIV and excluding grants that we send outside of CDC; that is internal CDC that we are showing on this chart.

Mr. **Early**. Okay.

Well, then let's focus specifically on the internal CDC activities. That isn't level funded; that is a decline from 1981 to 1990 after inflation isn't it?

Dr. **Roper**. Yes, sir.

Mr. **Early**. That is a drastic decline if we exclude resources for AIDS. We shouldn't be shocked at these numbers, which the Chairman brings up, for sexually transmitted diseases—syphilis, a 100 percent increase, Doctor?

Dr. **Roper**. Yes, sir.

SEXUALLY TRANSMITTED DISEASE PROGRAM

Mr. **Early**. And we are not doing much of anything. The fiscal year 1990 budget included a $2,500,000 increase for the sexually transmitted disease program.

How will CDC use this increase and how will the additional funds be allocated?

Dr. **Roper**. Our request for 1991 is almost $82,000,000, which is essentially the same amount as for 1990.

Mr. **Early**. And, how will the additional funds be allocated?

Dr. **Roper**. Right. That will be used, $71,000,000 in grants to states and other health departments, and about $11,000,000 for internal CDC operations related to sexually transmitted diseases.

Mr. **Early**. And at the same time, I repeat, syphilis has increased a 100 percent, Doctor?

Dr. **Roper**. Although some areas had increases of 100 percent, nationally in 1989, we had 44,000 cases of infectious syphilis, that is 13 percent over 1988 when we had 39,000, and 29 percent over 1987 when we had 34,000.

Syphilis is rising, and we are surely concerned about that.

Mr. **Early**. Well, you might be concerned, but the budget doesn't reflect it. The budget justification shows a decrease in the number of FTE's for the STD program between 1989 and 1990; doesn't it, Doctor?

Dr. **Roper**. Congressman, the difference you see is related to the fact that we overallocated FTEs in 1989 to meet a one-time program need.

Mr. **Early**. Well, expand on that for the record. When I read the justification, I see it as a decrease.

If you say it is not, to clarify that for us in the record .

Dr. **Roper**. Yes, sir.

[The information follows:]

FTE Reduction in STD

This FTE reduction is the result of overallocation in FY 1989 to meet a onetime program need.

CHLAMYDIA

Mr. **Early**. What progress can you report since last year in the national chlamydia control program?

Dr. **Roper**. Pardon me, sir. I missed the first part of your question.

Mr. **Early**. What progress can you report since last year in the national chlamydia program?

Dr. **Roper**. Since 1985 we have been developing programs in prevention and control of chlamydia. Forty-two states have at least one city or county sexually transmitted disease program that offers a comprehensive program against chlamydia, but numbers of cases continue to rise.

Mr. **Early**. So chlamydia is increasing, and we are not doing much more about it.

For the record, summarize CDC's 1990 and 1991 program plans for the prevention and control of chlamydia, please.

Dr. **Roper**. Yes, sir.

[The information follows:]

1990 and 1991 Chlamydia Control Activities

To continue emphasis on the nationwide chlamydia prevention and control effort so that at least the 35 counties with the highest morbidity have comprehensive prevention and control programs, program strategy will include: (1) implementation of the recommendations contained in "*Chlamydia trachomatis* Infections—Policy Guidelines for Prevention and Control, and in the 1989 STD Treatment Guidelines", (2) special demonstration projects and applied research activities to evaluate different intervention methods, (3) to emphasize the implementation of opportunities for preventing chlamydia infections and their complications which require minimal increase in program expenditures.

Mr. **Early**. How much is being allocated in this budget for prevention and control of chlamydia in 1991?

Dr. **Roper**. $18,700,000 in our grant program, and $1,800,000 in our direct operations against chlamydia.

IMMUNIZATION—VACCINE STOCKPILE

Mr. Early.

Doctor, for the sexually transmitted diseases program, the immunization and everything else, the best you can say is that you are level funding; isn't it, Doctor?

Dr. **Roper**. In many of the programs, we are. We are able to do more because of better management and innovative techniques, but you are right, resources are constrained.

Mr. **Early**. How can we rationalize these numbers on immunization, Doctor? You are projecting an increase for immunization overall; aren't you, Doctor?

Dr. **Roper**. We are going to be able to buy the same amount of vaccine for the dollars requested. We have had a decrease in the price of vaccine, which allows us to spend less and get the same amount.

Mr. **Early**. Yes, but there is a significant decrease in the vaccine stockpile.

Do you concur that we should have that type of decrease?

Dr. **Roper**. We have a five month stockpile of vaccine. The goal for several years has been to get to six months. I believe in a time of scarce resources, five months is sufficient.

HIV

Mr. **Early**. You think that is adequate.

Doctor, we seem to just react. AIDS is getting attention because the gay community has been successful in focusing attention on it. Other areas don't seem to have any audience.

Would you comment on that?

Dr. **Roper**. My comment to that is, sir, I do not want to come back before this committee or some other committee talking about why we were not able to deal with a future health care problem, and that is why I have chosen as my number one priority at CDC to look at and build the infrastructure that allows us to deal with these problems. I am agreeing with you.

Mr. **Early**. I know that.

Doctor——

Mr. **Williams**. Mr. Early, I would say, though, with respect to sexually transmitted disease, apart from what CDC is doing, the National Institutes of Health also does a fair amount of research on sexually transmitted diseases and is spending in 1991 probably in the range of $75,000,000 on research related to those diseases.

I think it is also fair to point out that HIV is a sexually transmitted disease, and that activities related to HIV also affect——

Dr. **Roper**. Sure. There is a carry-over effect.

HIV TRANSMISSION

Mr. **Early**. You speak of AIDS, which is getting increased resources, as a sexually transmitted disease. We know that initially sexual transmission was predominantly a problem in the gay community and we know it was a result of blood transfusion.

Let me ask you, Dr. Roper, would you say that heterosexually transmitted AIDS is less than homosexual transmission or transmission from blood transfusion?

Dr. **Roper**. The problem that is the greatest now and growing is transmission of HIV among the intravenous drug abusing community and their sexual partners. That is our principal concern, and that is directly a sexually transmitted disease concern.

Mr. **Early**. But, again, we have had that the last few years as far as the work of the institutes with regards to STD's. They have always done that. Mr. Williams, have the numbers increased at the institutes for STD over the years?

Mr. **Williams**. In 1987, NIH estimated they were spending about $51,000,000, and that has grown to $75,000,000 into 1991.

Mr. **Early**. In all the institutes?

Mr. **Williams**. In NIH in total, yes.

Mr. **Early**. Does that include CDC?

Mr. **Williams**. No. That is just the National Institutes of Health.

HIV—HEMOPHILIA

Mr. **Early**. Doctor, a major concern this committee has is AIDS and the hemophilia population.

The 1990 bill provided a $4 million increase for CDC to expand AIDS risk reduction, including children and adolescents, and for improved counseling and systematic evaluation of prevention approaches.

How much has been allocated for this purpose in 1990, and how much is included in the 1991 budget request for addressing AIDS and HIV in the hemophilia community?

Dr. **Roper**. I believe it is $10,989,000 for FY 1990 and $11,298,000 for FY 1991.

Mr. **Early**. How does that compare to last year?

Dr. **Roper**. $7,153,000 was awarded in FY 1989.

Mr. **Early**. We really did a dismal job with regards to hemophiliacs; didn't we, Doctor? Before 1989 almost every hemophiliac contracted AIDS or HIV; didn't they, Doctor?

Dr. **Roper**. That is principally because of the fact that the disease was transmitted to hemophiliacs before we recognized it and developed a screening test.

Mr. **Early**. What are the results now, Doctor? Are any hemophiliacs getting AIDS?

Dr. **Roper**. Oh, yes, sir.

Mr. **Early**. Will you expand on that for the record?

Dr. **Roper**. Yes, sir.

[The information follows:]

AIDS In Hemophiliacs

Since January 1986, Factor VIII has been considered safe and transfusion related infection of HIV due to contaminated Factor VIII has rarely occurred. Unfortunately, by that time, 50–80 percent of all patients with hemophilia and 90 percent of all patients with severe hemophilia A were already infected with HIV. Almost 1,100 of those who were infected prior to 1986 have developed AIDS. The challenge to CDC and HRSA has been to prevent the "second" epidemic of HIV among the wives, sex partners, and offspring of those who have already been infected.

Mr. **Early**. And what are the CDC plans in this area for 1990 and 1991?

Dr. **Roper**. Surely.

[The information follows:]

1990 and 1991 Hemophilia Program

CDC, HRSA, and the National Hemophilia Foundation (NHF) have developed a program model which includes specific goals, objectives, and strategies for an effective nationwide AIDS/HIV risk-reduction program. Individual treatment centers have developed management plans that include outreach to those not actively involved in the center. An information clearinghouse has been developed at NHF for hemophilia-related HIV materials. Additionally, CDC will contract with NHF to develop innovative outreach activities to identify and serve patients with hemophilia that are not currently served by comprehensive hemophilia treatment centers.

In order to clearly identify which methods are most effective in promoting and maintaining behavior change, CDC has developed a program announcement establishing sentinel evaluation sites to study specific, theoretically based protocols for both adults and adolescents. Since the hemophilia population is considered to represent a cross-section of our society. such reserch is expected to benefit not only patients with hemophilia, but also a much larger segment of the population. Up to 10 adult and 15 adolescent evaluation sites will be established.

CDC and the Office on Materal and Child Health (OMCH) will jointly conduct case studies (site reviews) of the major hemophilia treatment centers beginning in 1990. The criteria for 1990 grant applications from OMCH require that each HTC provide regional and local information following a minimal data set. This data will help to establish more effective program measurement indicators and will be used to develop a program profile to the site reviews.

CDC and OMCH hav established an expert committee on education for HIV risk reduction in the hemophilia community to address the premise that the heterosexual and perinatal transmission of HIV in this community can be halted or reduced through educational strategies. In November 1989, the committee met for a three-day seminar to develop recommendations for such educational approaches. These recommendations include strategies based on the realities of existing resources and the unique needs of the hemophilia community. They include the development of a stronger organizational infrastructure nationally, regionally, and locally; the establishment of a full-time regional coordinator for HIV risk-reduction activities in each of the OMCH regions; the development and refinement of skill building programs for health-care workers which focus on adolescents, redproductive issues, and sexual history taking and counseling; and the further development of consumer programs including peer educational support groups for mothers of adolescents, men with hemophilia, and spouses and sex partners of patients with hemophilia who are HIV positive.

AIDS—LONGITUDINAL STUDIES

Mr. Early. Is there anything new to report from the series of longitudinal studies CDC has undertaken with respect to HIV and the hemophiliac community?

Dr. Roper. I would be glad to supply a status report for the record.

[The information follows:]

CDC LONGITUDINAL COHORT STUDY

The longtitudinal cohort study of persons with hemophilia was initiated in 1983, prior to the availability of tests for the human immunodeficiency virus (HIV). The study enrolled over 200 men exposed to known quantities of clotting factor concentrates in two groups: (1) men exposed to clotting factor concentrates prepared from donor plasma pools which included donors who had subsequently developed AIDS, and (2) hemophilia men exposed to comparable quantities of clotting factor concentrates from plasma pools from which no donors were known to have developed AIDS. These men have been followed prospectively over time since 1983. Subsequent development of specfic assays related to HIV infection have resulted in a transition from the original study design. Current analyses access men who have been infected versus men who remain uninfected. The original study design is no longer appropriate since nearly all clotting factor concentrates were derived from HIV-contaminated plasma pools. This cohort of men has been studied intensively and has provided a large amount of information on the nature of HIV infection in hemophilic men, morbidity and mortality rates in HIV infected hemophilic men relative to their uninfected peers, cofactors in the development of HIV disease, and the prevalance of HIV infection among hemophilic men as a function of the quantities of factor concentrate which they had received. Current studies include continuations of these analyes, and have expanded into looking at genetic risk factors for HIV infection and/or HIV disease progression.

An additional study has evolved out of the longitudinal cohort study. Because the modes of transmission of HIV infection were poorly defined in 1983, we studied family members of infected hemophilic men to estimate the risk of transmission to spouses or other sexual partners and to other household members. This study came to be called the Hemophilia Household Study of HIV Transmission. Since its inception in late 1983, the study has evolved over time. A large amount of evidence was generated from this study to support the currently well established fact that HIV transmission to casual contact household members has not been documented. Currently, the household study focuses on risk of HIV infection in sexual partners of infected hemophilic men and in family members who have assisted with intravenous infusions of clotting factor at home and who may be at risk due to percutaneous explosures acquired due to needle stick injuries.

The household study assesses both behavioral and biological factors which may relate to sexual transmission of HIV. In the latter part of 1988, study instruments and the study protocol were redesigned to stress enrollment of sexual partners and to provide more detailed information concerning specific sexual behaviors, use of barrier and non-barrier contraceptive methods, and history of sexually transmitted risk. Data generated from this study have been published in professional journals and multiauthor book format. Estimates of risk include seroprevalence at enrollment of 13.7 percent in femal sexual partners of hemophilic men, and a seroconversion incidence density of 0.023 seroconversions per person year of sexual exposure. During 1989, we attempted to increase enrollment and follow-up of couples in this study. Because of this, a large number of new couples have been enrolled in 1989 and we anticipate that the power of the study to evaluate risk of sexual transmission will nearly double during the next year of follow-up (calendar year 1990).

Both of these studies have been conducted in conjuction with the National Hemophilia Foundation, which has encouraged and supported these studies on a national basis, and has assisted in providing information back to the hemophilia community. These studies will continue to produce important scientific information which will be valuable for HIV counseling and risk reduction efforts in the United States and elsewhere.

GROWTH DEVELOPMENT COHORT STUDY

Mr. Early. What is the status of the growth and development cohort study that CDC was planning to initiate?

Dr. Roper. Again, I would be glad to supply a status report for the record.

[The information follows:]

Hemophilia Growth and Development Study

The Hemophilia Growth and Development Study (HGDS) is a multicenter prospective study of the growth of hemophilic children (boys). The study is jointly funded by CDC and NIH and enrolls subjects at 14 comprehensive hemophilia treatment centers (HTC) throughout the United States. Hemophilic children and adolescents born between 1970 and 1982 and exposed to defined quantities of clotting factor concentrates are eligible for enrollment; we estimated that the catchment area of these 14 clinical centers contains approximately 20 percent of such persons in the country.

Prospective evaluation of the study groups will occur over a 4-year time span, with possible extension. Enrollment of subject groups 1 and 2 will be completed by May 1990. Evaluation will include physical examination, history and chart review, and neuropsychologic, immunologic and endocrinologic evaluations. Children who fail to meet established growth milestones or functional criteria will be "triggered" into more intensive evaluation protocols.

CDC's involvement with this study has primarily been in development and analysis of the immunologic evaluation, although interaction between the organ systems will be monitored carefully. Immune function assessments include measures of cell-mediated-immune function, humoral immunity, coinfection with other viral agents, and response to childhood vaccinations.

This study is a unique opportunity to assess the impact of both HIV infection and hemophilia on the physical growth and neuropsychologic and immune function of children exposed to HIV between the ages of 1 and 15.

PEDIATRIC AIDS

Mr. Early. What are CDC's plans for 1990 and 1991 in the area of pediatric AIDS?

Dr. ROPER. Pediatric AIDS has long been a concern of the Department's. Indeed, the new Surgeon General, Dr. Novello, has chaired the task force on pediatric AIDS.

For total pediatric AIDS activities for fiscal year 1991, we are requesting approximately $44,000,000. That is an increase of approximately $16,000,000 over 1990 for a variety of AIDS activities directed at children.

Mr. EARLY. Dr. Shuster testified the other day, Doctor. You were talking about a lot of exciting drugs, but there didn't seem to be anything for pediatric AIDS.

Dr. ROPER. There is some progress being made in the area of treating children with AIDS.

The National Cancer Institute, for example, has a major program under way that I am familiar with directed at attempting to use the drugs that are used in adults, AZT, for example, in children.

Mr. EARLY. Are you testing it at CDC?

Dr. ROPER. CDC is not doing that. NIH is doing that.

Mr. EARLY. Are you satisfied that CDC is doing as much as they should be doing with regards to pediatric AIDS?

Dr. ROPER. We are proposing to dramatically expand further what we are doing, and, yes, sir, I think that is what we ought to be doing.

Mr. EARLY. You weren't doing anything, or very, very little?

Dr. ROPER. Spending almost $28,000,000 this year and we are asking for approximately $44,000,000 next year.

Mr. EARLY. What were you spending in 1989?

Dr. ROPER. $25,000,000.

Mr. EARLY. From $25 million to $28 milion is not really expanding too much.

Thank you, Mr. Chairman.

Mr. Chairman, I have a lot of other questions for Dr. Roper that I will submit for the record.

Mr. NATCHER. That is fine, Mr. Early.

HIV—HEMOPHILIA

Mr. Porter, I yield to you.

Mr. PORTER. Thank you, Mr. Chairman.

Dr. Roper, it is nice to see you back in your new capacity. You have had three jobs. Which one is the toughest?

Dr. ROPER. They each have unique challenges. I am delighted to be where I am.

Mr. PORTER. That sounds like a very polite answer.

Let me follow up on what the gentleman from Massachusetts raised and ask a question, if a 100 percent or virtually 100 percent of hemophiliacs have been HIV positive up to 1989 and now we are doing a better job of screening the blood and the incidence should be going in the other direction.

But if people that are HIV positive are having children, aren't the children also going to be HIV positive, or is that not necessarily the case?

Dr. ROPER. Well, the hemophiliacs themselves, of course, will be men. If they transmit the disease through sexual contact to their wives, then, yes, their wives may have some children, who have HIV infection.

Mr. **Porter**. What do we do to control HIV in that whole segment of the population?

Dr. **Roper**. Much of the $11,000,000 that I was talking about in FY 1990 devoted to HIV among hemophiliacs is directed to helping them stop the transmission of the disease to their sexual partners and to their children.

That is the major challenge for the future.

Mr. **Porter**. Not just in hemophiliacs, but anybody that is HIV positive.

Dr. **Roper**. Surely, yes.

HIV MUSEUMS

Mr. **Porter**. Let me ask about the AIDS problem in another context.

The Nation's science museums are very anxious to be helpful in providing AIDS education. And since they have about 120 million visitors a year, and very often these include millions of at-risk inner city youth, it seems to me that they have a very unique chance to reach people that with an interactive kind of exhibit that might really do a great job.

What is your feeling about their role in AIDS education and what is CDC doing?

Dr. **Roper**. In our budget this year we have approximately $200,000 devoted towards assisting museums in their exhibits having to do with HIV. We think that is a worthy expenditure and plan to continue that kind of activity.

We are seeking to do a variety of things better to educate the public on HIV.

Mr. **Porter**. My understanding is that they will bring, matching private sector resources to the table, and if you had more money in that account, would it be, therefore, wisely spent?

Dr. **Roper**. I don't mean to be cute, but we will wisely spend whatever amount you give us. I think you have to consider the other uses to which further money might be put, and we think the current expenditure, of approximately $200,000, is about right for this activity.

Mr. **Porter**. I think that we can probably do a great deal more in reaching targeted populations. It won't require a great deal of resources that will be matched in the private sector, so perhaps this is a very, very good way of providing the kind of education and help that supplements what is done in the school-based education program.

FIREARM INJURIES

Let me ask about something that we never ask about, because I am not sure that it is done by CDC, and that is firearms injuries.

My information is that the most recent data we have, 1987, 33,000 people died in the United States from firearms injuries, and that there are perhaps five times as many people with nonfatal injuries from firearms in the United States each year. So this would be I think a serious health problem.

Dr. Roper. It is.

Mr. Porter. There seems to be an absence of good, reliable, routinely collected data, and I wonder if CDC does anything on this or has any plans to collect data on firearms injuries?

Dr. Roper. Yes, sir. We are doing that and plan to do more.

Your question is surely correct, that firearm injuries are the largest category of injuries in this country. Homicide and suicide are the major problems, especially in young black males, and we, through our surveillance systems with the states and our injury control program, are gathering the sort of information you are asking for on all injuries and in this case on firearm injuries.

Mr. Porter. Would those indicate the types of weapons that are causing the injuries, for instance assault rifles as opposed to hand guns?

Dr. Roper. Yes sir. We are adding to our information capability to gather specific information on the kind of firearm.

Mr. Porter. And for the data, on the firearms injuries that you have covered so far, how would it break out between homicides and suicides?

Dr. Roper. I will be glad to——

Mr. Porter. If you can provide that.

Dr. Roper. I will be glad to provide the figures for the record. I don't have them with me.

Mr. Porter. Okay.

[The information follows:]

Firearm Injuries

Of the 33,000 firearm deaths that occur each year, approximately 18,000 of 55 percent, are attributable to suicide. Firearms are the most common method of completed suicide, accounting for six out of every 10 suicides. The great lethality of firearms may explain this predominance of firearm use among completed suicides, despite the fact that firearms are involved in only a very small proportion of attempted suicides. Homicides with firearms account for approximately 13,000 deaths. As with suicide, firearms are the most commonly used homicide weapon, accounting, again, for approximately 6 out of every 10 homicides. It is worth noting that, although the large majority of firearm deaths are indeed homicides and suicides, approximately 1,500 deaths occur each year due to unintentional discharge of firearms. Most of these so-called "accidents" are among children, adolescents, and young adults.

CHRONIC FATIGUE SYNDROME

Mr. Porter. Can I ask, Dr. Roper, about chronic fatigue syndrome.

You have done a very, very fine job in studying this disease. I wonder if you can kind of bring us up to date on what you are finding.

Dr. Roper. Yes, sir. Thank you.

We last year spent approximately $1,200,000 in chronic fatigue syndrome research. Our activities have primarily been in the area of trying to characterize this syndrome and gather information on it.

We are still gathering information on chronic fatigue syndrome and attempting better to characterize just what this problem is and how widespread it is.

Mr. Porter. Have you published any findings yet?

Dr. Roper. No, sir, we have not.

Mr. Porter. Are there any plans to do so any time soon?

Dr. Roper. Yes, sir. We are in the process of a surveillance program in Atlanta, Georgia; Grand Rapids, Michigan; Reno, Nevada; and Wichita, Kansas. Once we have completed that information gathering, we will be publishing the results.

Mr. Porter. I have other questions that I want to put in the record, but thank you very much.

Dr. Roper. Thank you.

HEALTH STATISTICS

Mr. Natcher. Dr. Roper, a number of federal statistical agencies are receiving increases, as you know, in the 1991 budget, including the Bureau of Labor Statistics, the Census Bureau, the National Center for Education Statistics and others—

Why is the National Center for Health Statistics receiving no increase in 1991? How do you justify it?

Dr. Roper. They are enjoying a $1,000,000 increase, and in a time of scarce resources, we are trying to make that money go as far as possible.

Mr. Natcher. Are health statistics considered to be of lesser importance, Dr. Roper, than the others that I have just mentioned? What category do you put them in?

Dr. Roper. Our ability to gather health statistics is central to many of our programs.

Indeed, a half an hour ago, Secretary Sullivan held a press conference releasing Health United States 1989, which is an annual publication done by the National Center for Health Statistics that gives a wealth of information on our health as a Nation.

Mr. Natcher. On page 101 of the justification, it says that, and I quote, "New demands are increasingly being placed on the Nation's health statistics system."

What are some of these new demands, Dr. Roper, and how will this budget enable you to meet them? How do you intend to meet them?

Dr. Roper. The new demands primarily are in the area of more detailed information on subgroups of the population.

Earlier this morning I talked about health problems in minority populations, and the challenge that we face is being able to gather statistically valid information, not only on the general population, but among subgroups of the population.

We plan to do that through careful use of our resources.

Mr. Natcher. On page 103, you show a reduction of $1,960,000 for lower priority health statistics activities. What are you planning to cut here, Dr. Roper?

Dr. Roper. We are still in the process of looking at the various surveys that we undertake and ranking their priorities, so we have not yet decided on that point.

Mr. Natcher. Are you postponing or eliminating any health surveys in 1990? If so, which ones, Dr. Roper?

Dr. Roper. We are doing them all in 1990.

Mr. Natcher. What do you mean? You say you are doing them all.

Dr. **Roper**. I understood your question to be, sir, were we postponing or eliminating surveys in 1990, and what I said is we are not——

Mr. **Natcher**. You are not postponing any of them?

Dr. **Roper**. No, sir. We are looking at our resources for 1991, and one of the options for being able to undertake our program is deferring some of the surveys in 1991.

AIDS ACTIVITIES FUNDING REQUEST

Mr. **Natcher**. Your 1991 request for AIDS activities, as you know, at CDC is for just over $500,000,000—$509,103,000—an increase of 15 percent over last year.

AIDS funds would represent about 44 percent of your total agency budget. That is about right; isn't it, Dr. Roper?

Dr. **Roper**. Yes, sir.

Mr. **Natcher**. In your opinion, Doctor, does this request fully meet CDC's needs for 1991 for AIDS?

Dr. **Roper**. I believe that it is the best way to use the dollars we have, yes, sir.

Mr. **Natcher**. To what extent was the agency required to postpone certain activities to next year's budget?

Dr. **Roper**. You mean HIV activities, sir?

Mr. **Natcher**. Yes, HIV activities. Did you get everything you asked for, Dr. Roper?

Dr. **Roper**. No, sir. We never get everything that we asked for.

Mr. **Natcher**. Let's put it in the record. What did you ask for, Dr. Roper?

Dr. **Roper**. I started three weeks ago, but my predecessor asked for——

Mr. **Natcher**. What did he ask for? Go ahead.

Dr. **Roper**. Approximately $1,100,000,000. The Public Health Service asked for $630,000,000. HHS asked for $530,000,000. And we are asking for $509,000,000.

Mr. **Natcher**. All right.

Tell us generally how you will use the increase of $66,277,000 in 1991, Dr. Roper.

Dr. **Roper**. Yes, sir. I will be glad to explain a detailed answer for the record, but just to summarize, of the $66,000,000, $14,000,000 is targeted at women and infants. Apporoximately $16,000,000 is a restoration of the 1990 sequester and basic program increase.

Other amounts are for the AIDS hot line, $1,300,000; the AIDS clearinghouse, $5,600,000; high risk youth, $5,200,000; counseling and testing, $4,000,000; IV drug users, $4,000,000; national minority organizations, $1,700,000; lab training, $3,500,000; surveillance, $3,000,000, sentinel surveillance $2,600,000; and occupationally related studies, $4,300,000. The total increase is a little over $66,000,000.

Mr. **Natcher**. Now, Doctor, do you have any brand new activities planned for 1991, or will you just be expanding ongoing programs?

Dr. **Roper**. We will be expanding our current programs, but we will be doing it in some more innovative ways.

One of the things, for example, we will be doing is targeting the resources better to the intravenous drug using populations, and the minority populations, and to young people with AIDS.

Mr. NATCHER. You are requesting a 10 percent increase in your AIDS staffing level, I believe, FTEs?

Dr. ROPER. Yes, sir, we are requesting 848 FTEs for HIV activities in 1991.

Mr. NATCHER. In what area will you utilize the additional staff, Doctor?

Dr. ROPER. I would be glad to go over that with you now, sir, or explain that for the record, but they are spread across the AIDS effort about like the dollars I described.

Mr. NATCHER. Just put it in the record for us.

[The information follows:]

FY 1991 HUMAN IMMUNODEFICIENCY VIRUS FTE REQUEST

2 FTEs to undertake evaluations designed to document the impact of alternative counseling techniques on behavior and subsequent HIV serostatus among high-risk persons of different socio/demographic characteristics, especially poly-drug users, sex partners of infected persons, and minority populations.

7 FTEs to prevent HIV transmission among women and infants.

4 FTEs to assess the effectiveness of street outreach in reducing rates of HIV infection in IVDUs and in their sex partners.

5 FTEs to annualize funding for approximately 32 minority organizations and consortiums which are currently supported through the National and Regional Minority Organizations Grant Program.

7 FTEs to build the HIV prevention capacities or organizations that provide social, economic, and other services to youth who are most likely to engage in high-risk behaviors.

4 FTEs to maintain an adequate supply of materials in the National AIDS Information Clearinghouse (NAIC) to meet the anticipated public demand.

3 FTEs to sustain the level of services provided to the public by the National AIDS Hotline.

5FTEs to develop and evaluate a simplified reporting system for symptomatic HIV-related disease and health-care costs in selected geographic areas.

5 FTEs to provide financial support and technical assistance to standardize HIV reporting and to receive and disseminate summary data from 15-20 States with HIV reporting.

5 FTEs to conduct a major epidemiologic study of surgeons and other appropriate personnel in 5-10 U.S. hospitals and appropriate settings to estiamte the frequency of blood exposures, the risk of infection attributable to these exposures, the determinants of exposure, and efficacy of preventive measures.

1 FTE to expand HIV-related laboratory training and quality assurance.

32 FTEs to improve management of existing HIV programs.

Mr. NATCHER. Does the agency have difficulty in obtaining adequate AIDS staffing?

Dr. ROPER. We are always challenged by the task of getting the best and brightest people, but thus far we have been able to get good people, but that is a challenge.

HIV—PAID ADVERTISING

Mr. NATCHER. Does the basic law authorize CDC to purchase advertising time?

Dr. ROPER. The legislation passed in 1988 authorizes our agency to purchase advertising. We have not done that, but we are able to do it under that authority.

We are currently studying the advisability and utility of paying for advertising. My governing presumption is that is probably not the best way to go, given our desire to use free advertising at the courtesy of the broadcast network and others but we are evaluating that possiblity as a tool.

Mr. NATCHER. In your opinion, Doctor, is it a good idea for the Federal Government to do this, or should we continue relying on public service announcements?

Dr. ROPER. We are studying that question right now.

My belief at the present time is that we ought not pay for advertising.

HIV PREVENTION FUNDING AMONG STATES

Mr. NATCHER. On what basis does CDC currently allocate AIDS prevention funds among the states, Doctor?

Dr. ROPER. We are currently allocating HIV prevention and education funds to the states in two categories, prevention funds that go through health departments and education funds through education departments in those states.

They are awarded on a competitive basis based on applications that we receive from the state agencies. That is how we are doing it this current fiscal year.

Mr. NATCHER. Doctor, do you plan to change that allocation system in 1991? If so, how, Doctor?

Dr. ROPER. We are, with some care, developing a new formula for allocating these funds.

In the area of HIV prevention, what we will be doing is allocating half of the money through a formula that looks at the population of the state and the extent to which they have been affected by the epidemic, among other factors.

The other half of the prevention money will be awarded through a discretionary process with first priority being given to not disrupting programs that are already under way and that we believe are successful. In the education area, a similar breakdown would occur, a portion of the money going through a formula and the rest through a discretionary process.

Mr. NATCHER. If you will, provide a table for the record showing AIDS dollar allocations by state for 1988, 1989, and 1990, Doctor. Just place that in the record for us.

Dr. ROPER. Yes, sir.

[The information follows:]

AIDS Prevention and Education Allocations by State for FY 1988, 1989, and 1990

PREVENTION

	FY 1988	FY 1989	FY 1990
Alabama	$ 811,800	$ 1,137,727	$ 1,096,454
Alaska	594,438	851,241	684,389
Am Samoa	34,141	62,864	62,517
Arizona	982,159	991,483	1,182,240
Arkansas	800,805	925,889	1,014,300
California	4,292,832	6,597,003	5,945,425
Los Angeles	3,522,425	5,872,815	5,291,449
San Francisco	1,564,618	4,573,520	4,100,812
Colorado	1,759,492	2,196,930	2,080,259
Connecticut	1,901,890	2,933,264	3,140,208
Delaware	473,875	861,076	850,003
District of Columbia	1,873,254	2,428,159	3,371,716
Florida	5,936,225	10,516,417	9,885,125
Georgia	2,203,776	3,832,480	3,829,102
Guam	107,788	152,305	165,858
Hawaii	726,633	1,004,596	1,111,389
Idaho	298,266	375,009	364,181
Illinois	2,930,347	3,788,134	1,611,342
Chicago			2,169,500
Indiana	1,088,595	1,407,130	1,182,341
Iowa	529,951	757,703	792,732
Kansas	340,014	457,703	488,909
Kentucky	427,838	429,464	508,709
Louisiana	1,537,133	2,556,705	2,715,300
Maine	387,935	490,462	561,269
Marshall Is		76,082	66,650
Maryland	3,445,313	5,146,073	5,257,683
Massachusetts	2,893,137	4,513,686	4,250,132
Michigan	2,424,869	3,681,386	3,730,197
Micronesia	24,847	64,754	813
Minnesota	1,108,753	1,710,190	1,672,197
Mississippi	613,273	643,391	875,116
Missouri	1,367,981	1,814,221	1,830,890
Montana	329,404	438,077	461,287
Nebraska	347,363	464,856	542,353
Nevada	337,541	553,869	587,731
New Hampshire	460,561	513,753	502,549
New Jersey	5,776,407	5,890,786	6,923,367
New Mexico	592,906	1,047,138	1,342,473
New York	9,985,510	12,869,368	16,851,240
New York City	6,601,518	8,672,832	9,044,428
North Carolina	1,300,920	1,629,786	2,095,086
North Dakota	227,606	329,773	324,200
N. Mariannas	31,962	108,800	35,251
Ohio	2,284,642	2,234,335	3,143,338
Oklahoma	899,049	1,350,252	1,487,600

PREVENTION (Continued)

	FY 1988	FY 1989	FY 1990
Oregon	$ 904,980	$ 1,463,817	$ 1,453,050
Palau	47,773	52,711	15,233
Pennsylvania	2,991,031	4,043,533	3,014,300
Philadelphia			2,772,200
Puerto Rico	962,502	1,107,575	976,148
Rhode Island	488,309	667,035	755,961
South Carolina	1,224,037	1,515,636	1,850,443
South Dakota	244,298	193,606	237,640
Tennessee	990,799	729,186	1,402,734
Texas	6,125,294	6,290,116	6,268,690
Houston		2,308,949	1,845,276
Utah	315,608	386,470	292,327
Vermont	290,730	479,321	551,900
Virginia	1,631,758	2,238,041	2,094,621
Virgin Islands	125,376	189,069	188,100
Washington	1,383,048	1,426,813	1,363,624
West Virginia	641,389	754,197	664,839
Wisconsin	1,025,985	1,526,267	1,301,400
Wyoming	202,300	151,947	274,500
Total	$ 95,775,009	$ 134,477,776	142,553,096

AIDS Prevention and Education Allocations by State for FY 1988, 1989, and 1990

EDUCATION

	FY 1988	FY 1989	FY 1990*
Alabama	$ 235,976	$ 236,947	
Alaska	218,000	253,452	
Am Samoa	83,137	117,831	
Arizona	215,000	238,616	
Arkansas	200,062	241,880	
California	441,267	498,691	
Los Angeles	375,000	439,077	
San Diego	125,013	187,192	
San Francisco	809,327	1,045,419	
Colorado	212,502	250,000	
Denver	179,911	217,658	
Connecticut	214,389	254,357	
Delaware	214,965	251,427	
District of Columbia	224,750	327,995	
Florida	386,198	444,612	
Ft. Lauderdale	125,000	195,769	
Miami	173,749	216,055	
Georgia	226,357	260,000	
Guam	215,000	188,941	
Hawaii	225,547	260,000	
Idaho	216,988	222,487	
Illinois	215,000	249,826	
Chicago	208,366	253,942	
Indiana	212,280	259,776	
Iowa	215,000	230,379	
Kansas	215,445	264,393	
Kentucky	221,312	237,700	
Louisiana	215,311	251,109	
New Orleans	175,000	192,500	
Maine	215,000	253,332	
Maryland	215,000	245,804	
Baltimore	175,000	220,718	
Massachusetts	213,915	254,411	
Boston	226,615	259,859	
Michigan	576,920	611,600	
Minnesota	218,082	262,204	
Mississippi	214,961	220,530	
Missouri	220,503	203,726	
Montana	128,802	198,000	
Nebraska	205,950	228,352	
Nevada	231,539	254,146	
New Hampshire	215,305	249,953	
New Jersey	391,379	339,867	
Jersey City	125,000	178,120	
Newark	125,037	180,465	
New Mexico		159,253	
New York	686,460	748,360	
New York City	402,799	415,000	

EDUCATION (Continued)

	FY 1988	FY 1989	FY 1990*
North Carolina	$ 214,564	$ 241,531	
North Dakota	215,293	247,264	
Ohio	205,448	249,732	
Oklahoma	211,234	246,088	
Oregon	215,000	277,923	
Pennsylvania	211,912	236,485	
Philadelphia	175,000	238,843	
Puerto Rico	174,557	223,000	
Rhode Island	215,000	250,003	
South Carolina	214,551	249,551	
South Dakota	212,350	307,414	
Tennessee	215,511	240,000	
Texas	390,000	428,860	
Dallas	175,000	199,500	
Utah	216,500	250,000	
Vermont	215,000	253,738	
Virginia	215,000	249,869	
Virgin Islands	199,903	241,151	
Washington	215,000	247,632	
Seattle	174,650	200,267	
West Virginia	215,000	254,643	
Wisconsin	211,023	246,869	
Wyoming	214,873	249,219	
Total	16,706,488	19,601,313	

* FY 1990 applications will be received beginning May 7 and awards will be made in July 1990.

HIV—NATIONAL HOUSEHOLD SEROPREVALENCE SURVEY

Mr. **Natcher.** What was the outcome of the pilot testing of the household seroprevalence study in Pittsburgh and Dallas, Doctor?

Dr. **Roper.** We are still evaluating the results of those two preliminary studies, and I don't have a report for you. Be glad to supply that as soon as we have it.

Mr. **Natcher.** Any plans to expand the scope of the study?

Dr. **Roper.** We are looking at that possibility. These two pilot studies are key in our understanding of whether or not to do that, and as soon as we have reached a judgment, I will be glad to report that to you.

AIDS TESTING

Mr. **Natcher.** The Institute of Medicine has urged the development of laboratory proficiency standards and other measures to ensure the quality of AIDS testing.

What steps is CDC taking in this area, Doctor?

Dr. **Roper.** We have a major activity under way through our Public Health Practice Program Office devoted to assisting state labs in their proficiency across the board, and especially in HIV testing.

Legislation passed by the Congress in 1988 contains major requirements that will allow us to do even more in this area of upgrading lab proficiency.

This is one of our major activities.

HIV—SCHOOL AND COLLEGE AGED YOUTH

Mr. **Natcher.** Do you expect to initiate any new activities in 1991 with respect to the education of college and high school students in regard to AIDS, Doctor?

Dr. **Roper.** With money that you provided last year, we will be expanding this program. We are doing it in a variety of ways, public service media that we have already talked about, and then a variety of more directed, more targeted approaches to the school age and college age populations.

HIV—COUNSELING, TESTING, AND PARTNER NOTIFICATION

Mr. **Natcher.** As you know, you are requesting $99,844,000 for AIDS counseling, testing and notification. How much do you estimate that state and local governments will spend in 1991 for the same activities?

Dr. **Roper.** We do not now have, but will attempt to provide for you, for the record, an estimate of what state and local health departments are spending in counseling, testing, referral and partner notification effort. It is a sizeable amount.

[The information follows:]

State and Local Funded AIDS Counseling, Testing, and Notification

The States are not required to provide this information to CDC as a condition of receiving HIV prevention and surveillance cooperative agreement funds. However, according to the "National Survey of Spending For AIDS Programs" published by the Intergovernmental Health Policy Project at George Washington University, in FY 1989 State and local health agencies spent $46.3 million on counseling and testing activities. We do not have a current estimate of what they will spend in 1990 or 1991.

Mr. **Natcher**. Is the demand for testing and counseling increasing significantly?

Dr. **Roper**. It has continued at about the same pace.

We believe that the recent information that Secretary Sullivan has provided to the public regarding people who are infected with the HIV and who are not now clinically ill, benefiting from treatment by the drug AZT, will lead to additional number of people wanting to be tested for their HIV infection status.

We think there is going to be a further demand for testing and the associated counseling, referral and partner notification services.

Mr. **Natcher**. Will you be able to meet this demand, Doctor?

Dr. **Roper**. As you know, in our request we have asked for additional funds in this area. States and other organizations have also probably expanded their activities in this area.

We just have to wait to see whether we will have the resources to meet the demand.

HIV—SEXUAL BEHAVIORAL STUDY

Mr. **Natcher**. Doctor, as you will recall, last year we had before our committee a matter concerning a household sexual behavior study. If approved, would the Center for Disease Control participate Doctor?

Dr. **Roper**. There is a study under way within the Department of Health and Human Services whether or not to undertake such a study. We believe that the survey ought to be carefully planned, and if it does go forward, CDC will be an active participant in carrying out such a study.

Mr. **Natcher**. As far as you know, Mr. Williams, is there any money in the budget along that line?

Mr. **Williams**. You will recall that when Dr. Mason was here, he testified that, although he personally supported this study, there was no money in the budget to do it at this time, and that he certainly would consult with the Congress before anything was done.

COUNSELING, TESTING, AND PARTNER NOTIFICATION

Mr. **Natcher**. Are you considering changes in the current system of partner notification and contact tracing, or do you feel that the states are doing an adequate job in this area?

Dr. **Roper**. We believe that this is an area that is important in the Nation's effort against HIV.

We believe that people who may have been exposed to HIV have a right to know that so that they can evaluate their own infection status, and if they are infected, take steps not to pass the virus on to others and to get treatment if they need it.

Partner notification in the context of a broad program of counseling, testing and referral for needed services is important, and a program we will be emphasizing.

STD FUNDING

Mr. **Natcher**. You are requesting level funding for the sexually transmitted disease program in 1991. On page 71, Doctor, the justification says that these are collectively the largest communicable disease problem that we face in this country.

How is this reflected in your 1991 budget request, which does not even have an increase to cover inflation? What about that, Doctor?

Dr. **Roper**. Mr. Early and I had a chance to talk about that earlier, but I think the best answer I can give you is we are in an era of scarce resources and are attempting to use the dollars that we have to the fullest.

I recently had a chance to talk about our future plans with Dr. Mason, the Assistant Secretary for Health, and he, as you have and as Mr. Early has, pointed out the fact that we have a major challenge in the area of sexually transmitted diseases. He urged that I and CDC place special emphasis on coming up with new, more effective programs in this area and we are determined to do that.

STD NUMBER OF CASES

Mr. **Natcher**. How many cases of sexually transmitted diseases of all kinds were reported in 1989, Doctor?

Dr. **Roper**. Our estimate is that total numbers are about 12 million cases per year. That is an estimate, not numbers of reported cases.

Mr. **Natcher**. We note in the justification that the number of reported cases of syphilis in 1989 was 12 percent higher than 1988, and was the highest number reported since 1948, Doctor.

What accounts for this in your opinion?

Dr. **Roper**. We believe that the principal reason for the increase in the number of syphilis cases is the drug epidemic that we are having and the practice that has grown, unfortunately, of persons exchanging sex for drugs. Thereby the twin problems of drugs and sexually transmitted diseases have grown dramatically.

Mr. **Natcher**. What impact is this large case increase having on babies in this country, Doctor?

Dr. **Roper**. A terrible impact, because we are seeing that at the same time adults with sexually transmitted diseases are increasing, the number of cases of congenital syphilis has grown. Last year there were 925 such cases. The year before, 672. The year before that, 367. So we are seeing a terrible problem growing rapidly, vested on the children of this country.

Mr. **Natcher**. What steps are you taking, Doctor, to turn this situation around?

Dr. **Roper**. One of the things we are attempting to do is focus our resources in areas where drugs are a major problem. We have opened training centers for our personnel and those of state and local health departments in California, Georgia, Illinois, and Florida, targeted at dealing with the twin problems of drugs and sexually transmitted diseases.

GENITAL HERPES

Mr. **Natcher**. How many people in this country do you estimate are currently afflicted with genital herpes, Doctor?

Dr. **Roper**. Between 200,000 and 500,000.

Mr. **Natcher**. To what extent is herpes a cofactor in the spread of AIDS?

Dr. **Roper**. It is one of the important cofactors in the spread of HIV, because infection with the herpes virus makes a person even more likely to pass or to acquire the HIV through sexual contact.

Mr. **Natcher**. Any progress being made in the category of herpes, Doctor, generally speaking?

Dr. **Roper**. I will be glad to supply you a detailed answer for the record on herpes.

[The information follows:]

Herpes Progress

In the last decade, studies have continued into the epidemiology and natural history of sexually transmitted herpes which has an estimated prevalence of 30,000,000. Although no antiviral therapy is available that cures herpes, progress has been made in the development of antivirals capable of improving the outcome of neonatal and adult diseases. Unfortunately, prevention and control efforts are hampered because over three-fourths of genital HSV infections are transmitted by persons who are unaware that they are infected. As a result, over the next decade, attempts to reduce transmission will be based on the emphasis of primary prevention behaviors which will include safer sex messages and the development and field testing of a vaccine which can be given before individuals become sexually active.

Mr. **Natcher**. Well, give us a little better than that now.

In other words, what would the answer be, no, Doctor?

Dr. **Roper**. No.

SCIENTIFIC EQUIPMENT

Mr. **Natcher**. On page 9, we see that you are cutting back on purchase of scientific equipment by $6,659,000.

Why are you proposing this, Doctor?

Dr. **Roper**. That is one of the categories in which we are limiting expenditures in order to enable us to cover the pay raise in the budget.

Mr. **Natcher**. How much of a cut does this represent, percentage-wise?

Dr. **Roper**. Perhaps 50 percent.

Mr. **Natcher**. What would be the impact of such a cut, Doctor?

Dr. **Roper**. Well, it is deferring to the future our ability to acquire needed scientific equipment. It depends on how long we defer it what the real impact will be.

TUBERCULOSIS

Mr. **Natcher**. Do I understand that CDC has a strategic plan for the elimination of tuberculosis in the United States?

What can you tell us about that?

Dr. **Roper**. Well, it is a plan, sir, that we are pleased to embrace. It is not only CDC's plan, it is Secretary Sullivan's plan, to fully eliminate tuberculosis from this country by the year 2010, 20 years from now.

The problem of tuberculosis in this country is a long standing one and one for which we have made real progress over the decades. Unfortunately, beginning in the middle 1980s, about 1985, that progress stopped and we have seen a plateau in the number of cases.

What that says in practical terms is, a large number of Americans continue to have tuberculosis, despite our efforts.

We think we need to redouble those efforts and particularly target our resources to populations where they need direct assistance to take their medication in a timely fashion to eliminate the disease.

The proposal that we have before the committee will allow us to do some more of that, but this campaign against tuberculosis is a long campaign. The Secretary has projected a 20 year campaign.

LYME DISEASE—FUNDING

Mr. NATCHER. How much will you spend on Lyme disease in 1990, Doctor, and 1991?

Dr. ROPER. About $2,600,000 in each of those years, sir.

Mr. NATCHER. Do you have a definitive diagnostic test for Lyme disease?

Dr. ROPER. We have a diagnostic test, but we believe we can develop a better one, and a portion of the $2,600,000 is devoted to that.

INFANT HEALTH INITIATIVE

Mr. NATCHER. You are requesting a program increase of $11,500,000, and 25 FTEs for infant health activities.

How do you plan to spend this rather sizable increase, Doctor?

Dr. ROPER. Well, first of all, as I said earlier, infant health is a principal concern of the President, the Secretary, Dr. Mason, and me, and we are anxious to make progress in the infant mortality problems.

That $11,500,000 the President has requested is devoted to two activities within CDC, first developing better information systems in partnership with the states so that we can better characterize the problem of infant mortality and do something about it, and then second, assisting states in developing programs for stopping smoking among pregnant women.

Mr. NATCHER. When you get the record back, Doctor, if you will, go into a little more detail as to how the $11,500,000 amount was arrived at.

Dr. ROPER. Yes, sir.

[The information follows:]

INFANT HEALTH

Infant mortality prevention activities at CDC are an integrated effort including surveillance, epidemiologic studies, technical assistance to State health agency personnel, and limited direct research targeted to the reduction of perinatal, neonatal, and postneonatal mortality and morbidity related to low birthweight, sudden infant syndrome (SIDS), congenital anomalies, prematurity, complications of pregnancy, infectious diseases, and major nutrition-related health problems in infants and pregnant women.

In this partnership with States, efforts are directed toward reducing adverse outcomes in defined high-risk groups (Blacks, Native Americans, etc.) by identifying behavorial risk factors (e.g., smoking alcohol use, etc.) and developing and evaluating relevant interventions.

Through the $11.5 million infant health initiative, approximately two-thirds of the resources of the intitiative will be directed toward the following activities:

Support for two recently developed surveillance systems will be provided to approximately 10 new States for each system. One system gives a statewide view of risks and behaviors associated with poor pregnancy outcome and access to care. The second provides in-depth information on poor women attending public clinics.

Enhanced State-based surveillance to an additional 10 States for a total of 16 States and expanded surveillance among high risk populations in 22 States.

Four more States with high infant mortality rates will be targeted for extensive assistance with in-State placement of technical personnel to build the States' capacity for MCH epidemology. Such intensive epidemiologic assistance has been provided to South Carolina, Alabama, and Georgia through on-site assignment of MCH epidemiologists, in collaboration with the Health Resources and Services Administration and the States. This will include some resources for targeted investigations of problems identified during the analyses.

Birth and death certificates will be linked to key programs such as Medicaid and WIC, to monitor coverage and effectiveness in preventing low birthweight.

The remaining one-third of this enhancement will be directed as follows:

Over 900,000 children are born each year to women who smoke, a practice that doubles the risk of low birthweight and increases the risk of stillbirth or neonatal death. Maternal smoking accounts for 4,000 infant deaths each year, and nearly one-fourth of all low birth weight. Yet formal smoking cessation is not offered in many prenatal clinics. The CDC has launched a demonstration project in three States to develop effective Smoking Cessation in Pregnancy (SCIP) interventions for women receiving publicly-funded prenatal care.

This program will be expanded with the new funds in 1991 to a total of 20 States. State personnel will be trained to implement smoking cessation programs in public prenatal and WIC clinics and to monitor the quit rates and prevention of low birthweight in the recipients.

Specific epidemiologic analytic assistance will be provided, aimed at understanding the sources of black/white discrepancy in low birthweight and infant mortality, especially as related to risks amenable to intervention and access/utilization of services.

States will receive assistance to improve the capacity to monitor and reduce fetal alcohol syndrome, and other birth defects and developmental disabilities.

CHRONIC DISEASE CONTROL PROGRAMS

Mr. Natcher. What progress are you making working with the states to establish chronic disease control programs?

Dr. Roper. Seventeen states and 47 communities in those states have special programs encouragied by CDC called, "A planned approach to community health," that focuses on a broad set of chronic disease problems.

We now provide grants and technical assistance to 20 states plus Washington D.C. and the Republic of Palau for setting up multipurpose chronic disease prevention programs.

One of the things that we plan to emphasize is encouraging all the states to engage in such activities, because we think this is money well spent.

VACCINE PURCHASES

Mr. Natcher. You are proposing only a 1.5 percent increase in funds for vaccine purchases in 1991. I believe the amount is $1,315,000, Doctor.

Why are you expecting the cost of vaccine to remain essentially the same in 1991?

Dr. Roper. We just recently enjoyed a reduction in the price of vaccine and this is the reason for some of our optimism for the future. The price is an important factor in our ability to purchase vaccine?

VACCINE-EXCISE TAX

Mr. **Natcher**. How much is budgeted in 1991 just to cover the cost of the vaccine excise tax.

Dr. **Roper**. $2,900,000.

Mr. **Natcher**. $2,900,000. That is too low.

Dr. **Roper**. Well, we will get you an answer.

Just a second.

The amount is $26,000,000 to $30,000,000, but we will give you a precise answer for the record, Mr. Chairman.

[The information follows:]

Vaccine Excise Tax

A total of $26,616,000 is budgeted in 1991 to cover the cost of the vaccine excise tax. An additional $2,926,000 is included for the states that produce their own DTP vaccine.

MEASLES CASES

Mr. **Natcher**. Why has the number of measles cases gone up so much recently, and what accounts for this, Doctor?

Dr. **Roper**. The recent epidemics of measles that we have seen have been of two varieties. One is the cases among young children in inner city areas where we believe they are not well vaccinated to begin with, and then epidemics among high school and college children who have failed to develop antibodies with the first dose of vaccine. That is why our advisors have recommended that young Americans should be vaccinated twice, once at 15 months and a second vaccination later, either at entry to school or in junior high years.

That aggressive approach is the way to eliminate measles in the future.

MEASLES VACCINE

Mr. **Natcher**. How much additional would it cost in 1991 to provide for the second dose of measles vaccine in your grant program?

Dr. **Roper**. In the public sector, the estimated cost is $47,000,000, of which approximately $23,000,000 is the amount required for paying half of the cost of this additional vaccine.

Traditionally, the Federal Government has borne half the cost of public sector immunization programs and the states have borne the other half. Immunization grants are paying for approximately 95 percent of the MMR vaccine needed to provide the routine first dose at 15 months.

HEPATITIS B—SCREENING AND VACCINATION

Mr. **Natcher**. What kind of progress are you making in establishing the hepatitis B screening and vaccination program which was initiated in 1990, Doctor?

Dr. **Roper**. We have made substantial progress, but much more needs to be done.

What we are focusing on at the present time is screening women who are delivering babies to see if they are carriers of hepatitis B, and then immunizing their newborn children to protect them.

We would like to advance towards reducing the cases of hepatitis B in this country. Several states and localities have begun programs to test pregnant women for carrier state of hepatitis B and we want to capitalize on that with a vaccination program.

AGRICULTURE SAFETY AND HEALTH

Mr. NATCHER. The National Institute for Occupational Safety and Health received a large increase, as you know, in the 1990 bill, primarily for matters relating to agriculture safety and health.

What are your plans for programming this increase, Doctor?

Dr. ROPER. The increase in the agriculture program, farm safety and health, is going to be targeted at a series of activities: first, developing information through a farm family health and hazard survey; then, initiating cooperative agreements with state health departments to assign public health nurses to rural hospitals to work on activities in agricultural safety and health.

We will be establishing centers for agricultural safety and health to conduct research, demonstration intervention, and evaluation programs. We will also be establishing programs at land grant universities in coordination with the agricultural extension programs. We are conducting research on lung disease among agricultural workers, initiating cancer screening programs for agricultural workers, and also undertaking activities to collect more data on injuries sustained by workers on farms across the country.

Mr. NATCHER. Dr. Roper, we want to thank you and your associates for appearing before our committee at this time on behalf of your budget request for fiscal year 1991.

Mr. Williams?

REPROGRAMMING

Mr. WILLIAMS. Mr. Chairman, I would like the opportunity at the end of this hearing, if you don't mind, to go back and correct something I said at the beginning of the hearing.

You asked me earlier in the hearing about a reprogramming request for CDC and I told you that it was pending at OMB.

After consulting with staff, that turns out to be not quite true. There were two pieces to the reprogramming, one was for immunization grants and one was for reprogramming to the National Center for Health Statistics.

The immunization part of that reprogramming is really no longer necessary because, as Dr. Roper pointed out, the cost of vaccines this year has dropped. Therefore, we don't need to do that part of the reprogramming.

The other major part, $1,400,000, is in fact at the Department, and my office has raised some concerns about it. We are in discussions with CDC to look at what that reprogramming would do relative to the priorities expressed in the 1991 budget, and we are looking at it in the context of a broader Department study of health data strategy, as well.

So that reprogramming is really in my office at the moment.

Mr. NATCHER. Thank you, Mr. Williams.

Dr. Roper, as I said, we want to thank you and your associates. It has been a good hearing, Doctor. We want to wish you the best of everything.

After serving in HCFA, this should be a breeze.

Dr. **Roper.** Thank you, sir.

With your good help, it will be a breeze.

Mr. **Natcher.** Thank you very much.

The committee will now recess until two o'clock.

[The following questions were submitted to be answered for the record:]

HUMAN IMMUNODEFICIENCY VIRUS

Mr. Natcher: Has CDC been satisfied generally with the quality of the free advertising that it has gotten for the AIDS program so far?

Dr. Roper: Yes, the National "America Responds to Aids" campaign presently heavily relies upon public service advertising time, and, this approach has been extremely successful.

Mr. Natcher: Do you have any idea of what the dollar value of this advertising has been thus far?

Dr. Roper: In 1989 alone, the National "America Responds to AIDS" campaign received an estimated $19.5 million of free airtime, a figure far above that of any other government-sponsored health campaign. The total value of public service airtime since October 1987 is in excess of $48 million. Much of this has been in prime time - 8:00 p.m. - 11:00 p.m.

Mr. Natcher: What steps are you taking to improve the evaluation of AIDS intervention programs, as has been suggested by the National academy of Sciences and others?

Dr. Roper: CDC agrees that scientific evaluation of HIV prevention and education activities is extremely important. For this reason, there are ongoing and planned initiatives in fiscal year 1990 and 1991 to evaluate prevention activities. The CDC continues to incorporate evaluation as a basic component of its HIV activities. In fiscal year 1989, for example, program activities which constituted 94 percent of the HIV budget had evaluation activities in place or planned. The National Academy of Sciences, in its 1989 report, Evaluating AIDS Prevention Programs, recommended to CDC that approximately 10 percent of program funds should be used to evaluate HIV prevention activities. CDC estimates that it currently spends close to that amount on AIDS/HIV evaluation efforts. However, additional efforts are planned in the 1991 budget to evaluate the efficiency as well as the effectiveness of alternative prevention approaches (i.e., which approach is "best"?). In 1991, CDC plans to spend an additional $8.3 million to compare the effectiveness of alternative AIDS counseling techniques (e.g., peer vs. professional counseling), and to assess the effectiveness of street outreach and bleach distribution programs in reducing rates of HIV infection amount IV drug users and their sex partners.

Mr. Natcher: About how much do you plan to spend on AIDS evaluation activities in 1991?

Dr. Roper: CDC expects to spend an estimated $51.4 million for HIV evaluation-related activities in fiscal year 1991.

CHILDHOOD VACCINATION PROGRAM

Mr. Natcher: In the childhood vaccination program, does your 1991 budget request provide for the same number of doses for all the vaccines as in 1990? If not, where will you have a shortfall?

Dr. Roper: Our 1991 budget request will provide the same number of doses of vaccine as was provided in 1990.

Mr. Natcher: Why have you eliminated the vaccine stockpile funds in 1991?

Dr. Roper: We project that the vaccine stockpile, as originally proposed, will be over 90 percent complete by the end of fiscal year 1990. We believe that in a time of scarce resources, a five-month stockpile is sufficient. We also believe that maintaining funds to support measles outbreak control, age appropriate immunization, and the perinatal hepatitis B activities is of higher priority in 1991.

Mr. Natcher: How large is your stockpile now for each of the vaccines?

Dr. Roper: We estimate that with the vaccine purchased in 1990, the original 6-month stockpile for DTP, OPV, DT, Td and IPV will be 90 percent completed and that MMR will be 93 percent completed.

Mr. Natcher: What are the latest advisory committee recommendations with respect to measles vaccination?

Dr. Roper: During the last year, the Immunization Practice Advisory Committee (ACIP) has issued two new recommendations for measles vaccination. These recommendations call for a two-dose schedule for MMR vaccines for children entering primary school (kindergarten - first grade) and students entering college. The first dose for children is recommended to be administered at 15 months of age and the second dose at school entry. The ACIP also now recommends that, during outbreaks of measles, children within the outbreak area who have not previously received two doses of vaccine be revaccinated with MMR vaccine.

Mr. Natcher: How are you utilizing the additional funds that Congress provided in 1990 for measles outbreak control?

Dr. Roper: We are providing funds to the States where outbreaks are occurring. As of April, $3,790,900 has been awarded to 22 immunization projects for the purpose of measles outbreak control. Additionally, an estimated $3,500,000 will be awarded in the near future.

These funds have been most appropriate given the fact that 3,940 cases of measles in 1990 have been reported as of March 31. This is a 70 percent increase over the same time period in 1989. At least 34 deaths have been reported. There are 67 known outbreaks occurring in 21 states.

Mr. Natcher: Tell us how you are spending the funds provided by Congress in 1990 for the infant vaccine initiative.

Dr. Roper: A number of activities are being initiated to help improve age appropriate immunization levels in the United States. These funds are being used to:

- Support demonstrations to evaluate the effectiveness of new and innovative approaches to improving immunization levels in high-risk, inner-city areas.
- Support demonstrations to test multiple approaches to improving adherence to recognized policies and procedures not universally applied.
- Obtain a national estimate of vaccination coverage for children two years of age.
- Evaluate new approaches to increasing parental awareness, such as clinic-based education, outreach, negative and positive incentives, and use of the mass media.
- Obtain a reliable, easy to use and cost-effective population-based method of measuring preschool immunizations.
- Obtain more complete information on the impact of preschool morbidity in high-risk areas by supplementing projects with additional funds to identify patterns of transmission and to devise new intervention strategies.
- Increase consumer demand for immunization in high-risk areas by awarding contracts to community-based organizations.
- Conduct formal program reviews, follow-up visits and prepare formal reports in projects with excessive preschool morbidity. Develop and conduct training courses for local staff in those areas having excessive preschool morbidity.
- Collaborate with other Federal agencies to modify their guidelines to require screening and referral for immunizations.
- Collaborate with private organizations interested in immunizations to more effectively interface with their resources.
- Obtain project specific population-based coverage data on preschool children by standardizing procedures for retrospective assessments and revising immunization guidelines to require retrospective assessments.
- Facilitate greater use of computer software in patient follow-up and program management through reviewing existing systems, providing information to interested projects, and developing new software for Program managers.

WORKER NOTIFICATION

Mr. Natcher: What activities are you planning in the area of worker notification NIOSH?

Dr. Roper: NIOSH anticipates conducting notification for four cohorts of past NIOSH studies in FY 1990, in addition to notification of cohorts of ongoing studies completed in FY 1990. These past cohorts include workers exposed to cadmium, bis-chloromethyl ether, sulfuric/hydrochloric acid mist, and perchloroethylene. Notification should be completed for two of these cohorts in FY 1990, depending on negotiations with the companies involved, location of workers no longer employed by these companies, and other variables. Approximately 17,500 workers will be notified in FY 1990.

In FY 1991, an additional four to five new notification efforts, for cohorts not yet selected, will be conducted.

OCCUPATIONAL DISEASE SURVEILLANCE

Mr. Natcher: Are we making any further progress as far as occupational disease surveillance is concerned?

Dr. Roper: Yes, this is one of our major initiatives at this time. One important component is the development of case definitions, which will help assure greater uniformity in reporting occupational diseases. Dissemination of these case definitions should improve the reliability (and therefore utility) of occupational disease reporting and also encourage increased reporting. In FY 1990, we developed and disseminated nationally through the CDC Morbidity and Mortality Weekly Report a case definition for work-related carpal tunnel syndrome. NIOSH is preparing to disseminate a case definition for occupational asthma.

We are working with the States to encourage and support greater occupational disease surveillance through their activities. The Sentinel Event Notification System for Occupational Risks (SENSOR) program is supporting State-based occupational disease surveillance in ten States. In these States, (California, Colorado, Massachusetts, Michigan, New Jersey, New York, Ohio, Oregon, Texas, and Wisconsin,) networks of health care providers are reporting occupational disease and injury cases for selected "sentinel" conditions, for which the State health departments are providing follow-up services, including evaluating workplace health and safety conditions and providing recommendations for preventing continued occurrence of such cases.

We are working with the National Center for Health Statistics (NCHS) on various activities to improve national occupational disease surveillance data: establishing quality control for select data to be obtained in the third administration of the National Health and Nutrition Examination Survey; preparing to analyze data from the 1988 National Health Interview Survey (NHIS) supplement on occupational disorders. We are also working with the Bureau of Labor Statistics to redesign the Annual Employee Survey of Illness and Injury in the Workplace.

JAMES MADISON BUILDING

Mr. Natcher: In our Committee Report two years ago, we requested that NIOSH undertake a study of the indoor work environment in the James Madison Building of the Library of Congress.

What is the status of the study?

Dr. Roper: NIOSH has collected all the data for the study. Approximately 90% of the employees completed a comprehensive questionnaire on symptoms, concerns, workstation design, and job stresses. We conducted environmental monitoring, comparing areas for which employees had high levels of symptoms with areas for which they had low levels. We also evaluated the building's ventilation system.

Mr. Natcher: What findings do you have at this point?

Dr. Roper: The results of the study are being prepared and released in three volumes. The first volume, which provides a tabulation of health symptoms and comfort concerns, is completed and was disseminated in December. The second volume, providing the results of environmental monitoring, will be released this spring. NIOSH expects to complete the third volume in June, providing analyses to assess the relationship between health symptoms and comfort complaints and environmental risk factors.

Mr. Natcher: Have you made, or do you plan to make, any recommendations to the Library based on the study?

Dr. Roper: Any recommendations that may be necessary will be provided in the third volume of the report on this study. However, until the analyses are conducted comparing the environmental and survey data, we will not know the need for recommendations.

BREAST AND CERVICAL CANCER

Mr. Natcher: How are you implementing the new breast and cervical cancer control program that we initiated in the 1990 bill?

Dr. Roper: CDC will direct approximately one-third of the $5 million total to directly support State breast and cervical cancer mortality prevention programs. Assistance will be provided to 3 to 4 States in the initiation of comprehensive screening programs for the early detection and follow-up of breast and cervical cancer. Support will be provided to an additional State to augment existing screening and follow-up activities, resulting in a comprehensive breast and cervical cancer program in that State. State support will include the assignment of CDC field staff to assist in program design and implementation.

The remaining two-thirds of the $5 million will be directed toward the establishment of key core elements to serve as a base for a strong national program to prevent breast and cervical cancer. These elements are:

- Information/education campaigns to educate women on the value of regular screening for breast and cervical cancer.

- Education campaigns for health care professionals (including allied health professionals) to promote high-quality screening and effective follow-up.

- The development of standards, training, and tracking systems to ensure screening tests are of the highest possible quality.

- The augmentation of breast and cervical cancer surveillance systems to better target prevention resources and evaluate program effectiveness.

HIGH PRIORITY CONSTRUCTION PROJECTS

Mr. Natcher: In 1990, Congress appropriated $4,936,000 for "high priority construction projects" at CDC. How will these funds be used?

Dr. Roper: CDC will fund an architect and engineering contract to design a "state-of-the-art" occupational safety and health laboratory in Morgantown, West Virginia, and terrace parking at the Morgantown facility.

CDC FACILITIES

Mr. Natcher: Give us a status report on new CDC facilities underway or in the planning stage.

Dr. Roper: Facilities activities underway are:

- An 80,000 sq. ft. office building is under construction at our Chamblee location and is 20% complete. The estimated completion date is January 1991.

- A contract for 40,000 net sq. ft. office building at Chamblee will be awarded, under a lease/purchase agreement, by GSA in early April 1990. The estimated completion date is July 1991.

- The design for a 52,000 net sq. ft. laboratory at Chamblee will be completed in December 1990. The construction contract should be awarded in September 1991, under a lease purchase arrangement by GSA, with completion in September 1993.

- An 100,000 net sq. ft. office building will be awarded by GSA, under lease purchase, at the Clifton Road facility in the Fall of 1990 with completion planned for the Fall of 1992.

- During FY 1990, we will award an A & E contract for the design of a state-of-the-art occupational safety and health laboratory in Morgantown, West Virginia.

o A contract for terrace parking in Morgantown, West Virginia will be awarded in September 1990.

Mr. Natcher: For the record, provide a breakdown of the $30 million repair and maintenance backlog that you discuss on page 49.

Dr. Roper: The repairs include the following:

o	Replace inefficient antiquated burners and controls on boilers at Clifton Road	$500,000
o	Replace unreliable electric switchgear in Bldg. 10 and modify emergency generator system to permit automatic pickup of load during power failure	800,000
o	Connect Building One chilled water system to plant cooling-Clifton Road	80,000
o	Modernize fire alarm system at the Lawrenceville Facility	60,000
o	Replace rusted D.A. Tanks, multi-port valve, feedwater pump and control panel at the Lawrenceville Facility	146,000
o	Install a condensing water system on existing city water air conditioning system at the Clifton Road Facility	200,000
o	Clean interior of air handling units and ductwork - Clifton Road	800,000
o	Replace domestic water tank - Bldg 1 - Clifton Rd.	26,000
o	Modernize elevators and controls - Clifton Road	180,000
o	Install new floor, ceiling tile and lights in corridors of all buildings except Virology-Clifton Road	200,000
o	Install wire troughs and conduit system for new and existing computer cables - Clifton Road	70,000
o	Replace all old steam traps with new steam traps in all buildings except Virology - Clifton Road	50,000
o	Install new larger capacity electrical distribution breaker panels at all locations of old overloaded electrical breaker panels - Clifton Road	180,000
o	Replace central vacuum pumps and drives and decontamination system 0 Bldg. 10 - Clifton Rd.	32,000
o	Replace underground 12,000 gal. diesel oil tank Bldg. 10 - Clifton Road	18,000

o	Replace existing exhaust fans in Bldg. 1-South, 5, 6, and 7 with larger capacity fans-Clifton Road.	45,000
o	Replace air handling units AH00036 and AH00038, Bldg. 7, - Clifton Road	40,000
o	Restroom renovation - Clifton Road	200,000
o	Replace walk-in refrigerators RW00002, FW00001, FW00002, RW00003 - Bldgs. 5 & 7 - Clifton Road	80,000
o	New chemical feed system - Bldg. 10 - Clifton Road	40,000
o	Replace switch gear batteries - Bldg. 10, Clifton Road	10,000
o	Replace boiler feedwater pumps - Bldg 10, Clifton Road	10,000
o	Demolish and remove the following obsolete equipment: Old demineralizer - Bldg 6, Clifton Rd Old still - Bldg. 6 Old air compressor - Bldg. 8	32,000
o	Renovate Plant Maintenance Shops space Clifton Road	65,000
o	Replace worn-out cafeteria dishwasher - Clifton Rd.	45,000
o	Upgrade office lighting - Clifton Road	700,000
o	Install new floor, ceiling tile and light fixtures in all labs - Clifton Road	2,500,000
o	Replace water demineralizer - Clifton Road	105,000
o	Replace demineralized steam boiler - Clifton Rd	85,000
o	Reroof Building 1-East outside Library Clifton Road	45,000
o	Replace damaged laboratory doors Bldgs. 1 and 1-South, - Clifton Road	80,000
o	Install wallguards in laboratory corridors Clifton Road	20,000
o	Modernize old parking lot lighting system Clifton Road	135,000
o	Repair cracks in brick and mortar except Bldg. 15 - Clifton Road	2,000,000
o	Install new 1PA1 cooling towers for Bldg. 1, Clifton Road	90,000

o	Load bank for emergency generator testing Clifton Road	340,000
o	Paint interior and exterior - Bldg 10, Clifton Road	150,000
o	Replace the roof at Lawrenceville	500,000
o	Install new floor tile in all offices except Virology Bldg. - Clifton Road	1,200,000
o	Replace all old HVAC pneumatic control systems with new electronic controls - Clifton Road	1,100,000
o	Install heat recovery system for boiler blowdown and DA tank vent - Bldg. 10 - Clifton Road	12,000
o	Replace all old single pane windows with new double pane tinted insulation windows, all buildings except Virology Bldg. - Clifton Road	1,200,000
o	Replace Ransohoff cage washers #9272 & #9273, Bldg. 6 - Clifton Road	600,000
o	Lab renovations to provide high-tech lab for Bldg. 6 - Clifton Road	500,000
o	Replace cooling tower for walk-in refrig/freezer Bldg. 1-South - Clifton Road	50,000
o	Replace drinking water chillers, Bldg. 1, Clifton Road	5,000
o	Enclose existing open catwalks between Bldgs. 1, 3, 6, 7 and 15 and provide HVAC- Clifton Road	285,000
o	Replace high-voltage underground power cables serving Bldgs. 1-East, 1-South, 6 and 11 Clifton Road	110,000
o	Replace galvanized drain pipes and vacuum pipes from labs, Bldg.1, - Clifton Road	140,000
o	Update 30 year old autoclaves at Clifton Road	500,000
o	Renovate 5th floor of Bldg. 1, for systems furniture for 66 people - Clifton Road	725,000
o	Modify office, conference room, and public reading room, space at the Office on Smoking and Health, Rockville, Maryland	24,000
o	Renovate the Subbasement of Bldg. 3, and 4th floor of Bldg. #1 with systems furniture	416,000
o	Replace chilled water and preheat coils in air handling units 1 & 2 in "A" Building. Also, replace automatic air filters - Lawrenceville	85,000

o	Update the air conditioning system in Bldg. 1, office areas, Clifton Road Facility	2,000,000
o	Replace air handling units AH00015 and AH00050 at the Clifton Road Facility	50,000
o	Replace undersized condensate receiver and pumps in Bldg. 13 at the Chamblee Facility	26,000
o	Replace old boiler feedwater pumps with new pressurized loop feed system at the Chamblee Facility	22,000
o	Install an energy management system at the Lawrenceville Facility	200,000
o	Replace drinking water chillers, Bldgs. 5 and 7, Clifton Road	7,000
o	Replace galvanized drain pipes and vacuum pipes, Bldgs. 5 and 7, Clifton Road	75,000
o	Replace damaged laboratory doors, Bldgs. 5 and 7, Clifton Road	40,000
o	Sewage cooker for Building 6 to prevent Hepatitis virus from going from infected animal cage areas by way of the sewer system	750,000
o	Renovate Buildings 8 and 9 Clifton Road to TB Laboratories	877,200
o	Build a wall separating dog runs from monkeys at Lawrenceville	50,000
o	Renovate Bldg. 1E, 5th floor, for systems furniture for 30 people	300,000
o	Renovate Bldg. 1, 6th floor, for systems furniture for 20 people	200,000
o	Renovate 2 rooms for Personnel Management for systems furniture for five people	50,000
o	Renovate FDA property located at Taft Facility	500,000
o	Install fume hood in Room 159 at Morgantown	15,000
o	Modify Laboratory 166 in Morgantown and replace ductwork	175,000
o	Clean ducts in animal areas of Building 6 at Clifton Road Facility	45,000
o	Provide new ductwork to install laminar flow cabinets at Fort Collins Facility	33,000

o	Install feedwater heater on boilers at Clifton Road for heat savings	100,000
o	Install energy management system for Bldgs. 14, 15, and 17 at Chamblee	200,000
o	Repave roadway at Morgantown	20,000
o	Miscellaneous repairs	3,000,000
		$29,800,000

Mr. Natcher: Also provide a breakdown of just the request increase of $5,926,000.

Dr. Roper: The R & I projects included in the request are:

Project Title	City	Campus	Estimated Cost
Modernize Fire Alarm	Atlanta	Lawrenceville	60,000
Elevator Replacement	Cincinnati	Taft	250,000
Replace Fire Alarm	Cincinnati	Taft	350,000
Replace Fire Alarm	Morgantown	Morgantown	85,000
Modernize Elevators	Atlanta	Clifton Rd.	180,000
Radioactive Storage	Atlanta	Clifton Rd.	130,000
Replace Roof	Atlanta	Lawrenceville	500,000
Gas Cylinder Bldg.	Atlanta	Chamblee	80,0000
Sewage Cooker	Atlanta	Clifton Rd.	750,000
Halon System	Atlanta	Chamblee	60,000
Replace Burners	Atlanta	Clifton Rd.	500,000
Replace Switchgear	Atlanta	Clifton Rd.	800,000
Replace D.A. Tanks	Atlanta	Lawrenceville	146,000
Replace Water Tanks	Atlanta	Clifton Rd.	26,000
Install New Flooring	Atlanta	Clifton Rd.	200,000
Replace Steam Traps	Atlanta	Clifton Rd.	50,000
Replace Vacuum Pumps	Atlanta	Clifton Rd.	32,000
Replace Diesel Tank	Atlanta	Clifton Rd.	18,000
Replace Exhaust Fans	Atlanta	Clifton Rd.	45,000

Replace Cage Washers	Atlanta	Clifton Rd.	600,000
Install New Roof	Atlanta	Chamblee	250,000
Replace Air Units	Atlanta	Clifton Rd.	90,000
Replace Refrigerator	Atlanta	Clifton Rd.	80,000
Replace Chem Feed System	Atlanta	Clifton Rd.	40,000
Replace Station Bat	Atlanta	Clifton Rd.	10,000
Replace Pumps	Atlanta	Clifton Rd.	10,000
Demolish Equipment	Atlanta	Clifton Rd.	32,000
Replace Dishwasher	Atlanta	Clifton Rd.	45,000
Replace Light Fixture	Atlanta	Clifton Rd.	200,000
Replace Water Demin.	Atlanta	Clifton Rd.	105,000
Replace Steam Boiler	Atlanta	Clifton Rd	85,000
Reroof Bldg 1-East	Atlanta	Clifton Rd.	45,000
Install Wallguards	Atlanta	Clifton Rd.	20,000
Replace Rec & Pumps	Atlanta	Chamblee	52,000
TOTAL			5,926,000

INTERNATIONAL MEDICAL EMERGENCIES

Mr. Conte: In your professional judgment, what additional steps should CDC be taking in providing assistance in medical emergencies and disasters around the world?

Dr. Roper: CDC has been providing assistance in disaster situations since the mid-1960's. Over the years, we have helped to define the patterns of disease transmission and the public health consequences of a wide range of disasters and refugee situations; in addition, we have helped to prepare guidelines for systematic and effective interventions. The most significant contributions we can make are threefold: First, we need to continue to provide rapid emergency assistance to bilateral and international agencies and individual disaster-stricken countries in implementing effective intervention and disease control measures. Second, the skills which CDC has developed in the past need to be taught to a broad range of responding organizations, including U.S. agencies, international agencies, officials of foreign governments and U.S. and foreign based voluntary agencies. This transfer of existing technology should be carried out within the framework of preparedness training. The approach should be proactive, rather than reactive. Third, CDC needs to enhance its ability to conduct evaluations of the effectiveness of past disaster responses in an effort to learn how to better manage future crises.

In August of 1988, CDC was designated as a WHO Collaborating Center for Disaster Preparedness and Response. The establishment of this Center provides one convenient mechanism to allow CDC to carry out the tasks I have mentioned while reaching a broad, but focused target audience.

In these ways, CDC can be instrumental in improving coordination of relief efforts, increasing technical and economic efficiency, and providing more appropriate and rapid assistance to the unfortunate victims of natural and man made disasters and refugee situations.

REFUGEE HEALTH

Mr. Conte: Why is CDC involved in international refugee health issues?

Dr. Roper: First, let me say that under the provisions of the Immigration and Nationality Act and the Public Health Service Act, the Public Health Service, and namely CDC, is responsible for the medical screening of aliens, including refugees who are migrating into the U.S.

CDC's more global involvement in refugee and displaced persons health matters is based primarily on humanitarian grounds. We provide, under the authorities of the Economy Act and the Foreign Assistance Act technical assistance to other U.S. Government agencies and international organizations concerned with refugee matters. Our involvement in this critical area stems back to the late 1960's when at the request of the International Committee of the Red Cross, CDC provided epidemiologic assistance in dealing with problems resulting from civil war in Nigeria (Biafra). Our involvement continued in the mid-1970's in assisting populations displaced by famine and drought in Sahelian Africa, and in the late 1970's in dealing with problems encountered in Kampuchean refugee camps.

Our contribution to the overall effort in the Kampuchean situation, coupled with our intensive refugee relief activities in the Horn of Africa beginning in the early 1980's were widely recognized and greatly appreciated by many agencies charged with refugee care as a unique form of technical assistance applying epidemiologic techniques in a relatively rapid fashion to pinpoint critical health issues and identify those subpopulations at greatest risk, thus enabling more focused response efforts. Our involvement continues to the present.

Requests for CDC assistance come from the United Nations High Commissioner for Refugees (UNHCR), from the State Department's Bureau of Refugee Programs and, through appropriate channels, from foreign governments. In order to respond to these requests, memoranda of agreement have been established with both UNHCR and the State Department.

BREAST AND CERVICAL CANCER

Mr. Conte: This year alone, an estimated 142,000 new cases of breast cancer will be diagnosed and 43,000 women will die from this disease. In addition, cervical cancer results in nearly 6,000 deaths every year. To reduce the incidence of these cancers, this committee provided $5 million in FY 90 for this activity.

What is CDC doing in cervical and breast cancer?

Dr. Roper: CDC will direct approximately one-third of the $5 million total to directly support State breast and cervical cancer mortality prevention programs. Assistance will be provided to 3 to 4 States in the initiation of comprehensive screening programs for the early detection and follow-up of breast and cervical cancer. Support will be provided to an additional State to augment existing screening and follow-up activities, resulting in a comprehensive breast and cervical cancer program in that State. State support will include the assignment of CDC field staff to assist in program design and implementation.

The remaining two-thirds of the $5 million will be directed toward the establishment of key core elements to serve as a base for a strong national program to prevent breast and cervical cancer. These elements are:

- Information/education campaigns to educate women on the value of regular screening for breast and cervical cancer
- Education campaigns for health care professionals (including allied health professionals) to promote high-quality screening and effective follow-up
- The development of standards, training, and tracking systems to ensure screening tests are of the highest possible quality, and
- The augmentation of breast and cervical cancer surveillance systems to better target prevention resources and evaluate program effectiveness

In addition to these activities being funded in FY 90, CDC is also supporting breast and cervical cancer mortality prevention projects in nine States and in one Indian Health Service area using resources previously available from the core CDC budget. These projects are directed at the development and evaluation of intervention efforts, quality assurance of the screening tests, epidemiologic analysis, and improved surveillance.

Mr. Conte: What more needs to be done?

Dr. Roper: A substantial number of deaths from breast and cervical cancer could be prevented through a comprehensive systematic program of early detection and appropriate follow-up.

- It is estimated that mortality from breast cancer could be reduced by more than 30 percent if women were screened according to current guidelines. Survival from breast cancer is significantly improved if it is detected early. Yet only one-half of all women with malignant breast cancer in this country are diagnosed when their disease is still at an early stage. This is true despite the proven value of mammography and physical examination in the early detection of this disease.
- Although mortality from cervical cancer has decreased 70% during the last 35 years, the fact that an estimated 6,000 women will die this year from this disease is tragic given the effectiveness of early detection and treatment for cervical cancer. While the Pap smear tests have been used for more than 40 years, 27% of women in this country have not had a Pap smear test in the previous 3 years. Essentially all deaths from cervical cancer are preventable. However, underutilization of screening and lack of prompt diagnostic follow-up and treatment continue to result in unnecessary death in this country from this disease. Recognizing this, the Congress included provisions in the 1989 Omnibus Budget Reconciliation Act (OBRA '89) that allows Medicare to cover the cost of cervical cancer pap smears for female beneficiaries. HCFA estimates that the Medicare program will spend $40 million for pap smears in 1991.
- In order to substantially reduce deaths from breast and cervical cancer, the following needs to be addressed: availability of screening; appropriate follow-up and prompt treatment of those with abnormal test results; public and provider education on the value of current guidelines for screening; quality assurance of the screening procedures; and timely monitoring of the effectiveness of these activities.

Mr. Conte: We know, all too well, that many of the deaths resulting from breast and cervical cancer are avoidable with the proper use of Pap tests and mammography.

Why does it seem that these tests aren't being used as much as it should?

Dr. Roper: The cost of screening services, particularly mammography and follow-up care for identified cancers, is a clear barrier to the uninsured population's seeking services. However, there are other quite significant barriers to women obtaining screening.

For mammography, studies have indicated that a primary barrier to a woman's seeking a mammogram is the failure of her health care provider to recommend screening. Many women and their care providers may not be aware of the value of mammography in the early detection of cancer, or may not be familiar with current guidelines for screening. Clearly, educational messages need to go out to the public and to health care providers that screening according to current guidelines is critical in the early detection of cancer while the disease is still curable.

The Pap smear screening test has been available for more than 40 years, and in that time, we have seen a 70% decline in the mortality rate from cervical cancer. This is the good news and attests to the real value of the Pap smear test in the early detection of cervical cancer.

Tragically however, an estimated 6,000 women continue to die from cervical cancer each year. Virtually all of these deaths could be prevented through early detection and appropriate follow-up. An estimated 27% of U.S. women have not had a Pap test in the previous three years. Older women and women of low-income are at high risk for cervical cancer and are least likely to be screened. Many health care providers do not take advantage of a woman's visit to review her Pap smear history and to take a Pap test. When women do seek screening, we must ensure that the the screening test as obtained and as interpreted is of the highest quality and, finally, that women with abnormal test results receive appropriate and prompt follow-up. We should see some improvements in the situation since the Congress has provided Medicare coverage last year for cervical cancer pap smears in the 1989 Omnibus Budget Reconciliation Act (OBRA '89).

EPIDEMIC INTELLIGENCE SERVICE

Mr. Conte: The lynchpin of your disease and injury surveillance and tracking efforts is the E.I.S. -- the Epidemic Intelligence Service. I understand these young doctors in the Service use up a lot of shoe leather in tracking down mysterious disease outbreaks. What is the importance of the E.I.S. to the CDC?

Dr. Roper: The EIS is a 2-year program in-service and on-the-job training in applied epidemiology. It was created in 1951 and has graduated over 1,600 public health professionals trained in epidemiology to address the important public health issues of the day. The EIS helps CDC to: 1) carry out its mission to prevent and control disease; 2) increase the number of field-trained epidemiologists in the U.S.; and 3) to provide epidemiologic assistance to State and local health departments and improve disease and injury surveillance nationally. Working with experienced epidemiologists and leading health professionals across the country and internationally, EIS Officers serve at the forefront of disease investigation, prevention, and control. Each year EIS Officers conduct about 500 field investigations in response to requests for assistance. In the past year, these have included investigations of 1) the ongoing problem of EMS (eosinophilia-myalgia syndrome), a severe disease associated with use of L-tryptophan, a dietary supplement; 2) HIV infection on college campuses; 3) multiple outbreaks of staphylococcal food poisoning caused by consumption of imported canned mushrooms; 4) hip fractures in the elderly; 5) mammography screening programs in the worksite; and 6) an outbreak of Legionnaires' disease associated with grocery store mist machines. The ability to provide rapid response to emergent public health problems is greatly facilitated by this cadre of uniquely trained public health practitioners. As is evident, the EIS Program is addressing the Nation's needs for epidemiologists, but not only in the areas of training and service. In recent years, over three-fourths of the Program's graduates have remained in career tracks in public health, epidemiology, and preventive medicine.

Mr. Conte: In your tenure at CDC, Dr. Roper, how do you envision the role of the E.I.S. in the coming years?

Dr. Roper: As CDC expands into other areas of health promotion and disease and injury prevention, EIS Officers will continue to play a critical role in State and local health department assignments as shifting priorities of field assignments include new initiatives, e.g., chronic diseases, injuries, and environmental issues.

Mr. Conte: How much is in the budget for EIS in FY91?

Dr. Roper: The budget for the EIS program in 1991 is $9,300,000.

Mr. Conte: How many more states do you think should be covered by an EIS Officer?

Dr. Roper: Today, there are 38 EIS Officers in 30 State and local health department assignments. Because of the training nature of the program, attention to appropriate and adequate supervision is needed. This is not possible in every State. Currently, there are 35 assignments approved by CDC in State and local health departments open to the incoming class.

HUMAN IMMUNODEFICIENCY VIRUS

Mr. Conte: Last week I asked Dr. Fauci about HIV-2. I understand that there were some isolated instances of HIV-2 in America which came from Africa. What is the significance of HIV-2?

Dr. Roper: Human immunodeficiency virus type 2 (HIV-2) infection was first described in 1986 in West Africans with AIDS. HIV-2 infection appears to be endemic in West Africa, but rare elsewhere in the world. In the United States, there are seventeen known cases of HIV-2 infection; one HIV-2 infected person is a native-born U.S. citizen, but all other identified persons have been West Africans residing in the United States. Serologic surveillance data also suggest that HIV-2 infection is rare in the United States. Since 1987, sampling of over 25,000 high-risk persons and screening of Peace Corps volunteers returning from West Africa have not identified any other instance of HIV-2 infection in a native-born U.S. citizen. However, because currently licensed HIV tests do not detect all persons who are infected with HIV-2, there is concern that rare instances of HIV-2 in the United States may escape detection during blood donation or diagnostic evaluation.

Mr. Conte: Could it take hold in America to the extent that it has in Africa?

Dr. Roper: HIV-1 and HIV-2 are closely related and the modes of transmission for both viruses appear to be the same. There is no evidence that HIV-2 is more infectious than HIV-1. Though HIV-2 is currently rare in the U.S., continued monitoring is necessary and will be greatly supplemented after licensing of HIV-2 specific enzyme immunoassays (EIA) tests.

Mr. Conte: What is the extent of your tracking efforts on HIV-2?

Dr. Roper: CDC has conducted surveillance for HIV-2 in the United States since 1986. These activities include investigation of possible HIV-2 cases among over 25,000 high-risk persons, over 800 Peace Corps volunteers returning from West Africa, and over 4,000,000 U.S. blood donors.

Mr. Conte: Do blood screening tests for HIV-1 detect all cases of HIV-2?

Dr. Roper: Currently licensed HIV enzyme immunoassays (EIA), which are designed to detect antibody to HIV-1, will detect antibody to HIV-2 in 60 to 90 percent of HIV-2 infected persons.

Mr. Conte: If not, shouldn't you be working on tests to improve detection of HIV-2?

Dr. Roper: CDC has been working with FDA and commercial manufacturers to develop such tests. It is likely FDA will license an HIV-2 specific EIA in the near future.

Mr. Conte: As you know, Dr. Roper, underreporting or undercounting of AIDS cases has important public health and budgetary implications. How accurate are CDC's surveillances of AIDS cases?

Dr. Roper: The completeness of diagnosis and reporting of AIDS cases varies by geographic region and patient population. Evaluation studies using death certificates suggest that the completeness of AIDS case reporting at select sites ranges from 85-99 percent. In general, studies using hospital discharge (among persons who meet surveillance criteria) records suggest that completeness of reporting ranged from 60-70 percent in areas that had not yet implemented active case finding methods to over 80 percent in areas that had ongoing systems for active surveillance. Mortality studies of men 25-44 years of age suggest that 70-90 percent of HIV-related deaths in 1986 and 1987 (the most recent year for which final, national mortality statistics are available) are identified through national surveillance of AIDS cases.

Mr. Conte: What are you doing to reduce undercounting?

Dr. Roper: Effective May 1988, funding support was extended to all States for active case finding measures. CDC is working directly with State and local personnel to enhance AIDS case surveillance and to improve the completeness of reporting. In addition, CDC has initiated support for standardized studies to assess more formally the completeness of reporting in a limited number of areas. Funds have been requested in fiscal year 1991 to simplify the reporting of AIDS cases to public health departments.

SMOKING AND HEALTH

Mr. Conte: I hear that you have a very active Office on Smoking and Health, led by Dr. Davis. With the billions being spent to treat people with lung and heart diseases caused by smoking, I'm surprised that the budget is asking for only $3.4 million for CDC's efforts on reducing smoking. Secretary Sullivan has made it a top priority in protecting minority health from the cynical marketing practices of the tobacco industry.

Clearly we're making progress in reducing smoking. What worries me the most is smoking among our youth. What is CDC doing to cut smoking in young adults?

Dr. Roper: It is the mission of CDC's Office on Smoking and Health (OSH) to prevent death, disease, and disability caused by tobacco use and to coordinate a national program to reduce the prevalence of tobacco use in the overall population, as well as in specific target groups such as teenagers. The OSH is conducting a national prevalence survey and special analyses of teenage smoking behavior, as well as targeting specific information activities to reach this audience. During these past 10 years, OSH has targeted a number of its information efforts to teenage audiences: television, radio, and printed material have been produced and widely distributed.

In addition, CDC works with State and Territorial education agencies, national organizations, and other youth-serving agencies to help schools develop, evaluate, and improve health education programs that address a full range of health risk behaviors among youth, which include smoking. CDC's evaluation demonstrated that comprehensive school health education is an effective means of helping children improve their health knowledge and attitudes and decreasing the likelihood that they will adopt unhealthy behaviors like smoking.

LEAD POISONING

Mr. Conte: Doctor, being from the South, you know how bad the lead poisoning situation is down there, especially in the poor areas. It's also a big problem in New England, including western Massachusetts. Lead causes permanent intellectual and physical damage to children and it must be stopped.

What is the extent of the lead ingestion problem; and how can CDC contribute to reducing lead exposure in children?

Dr. Roper: According to the most recent available estimates, 3 to 4 million children in the U.S. have blood lead levels high enough to cause adverse effects on intellectual development, behavior, and health. Among these children, an estimated 250,000 would be considered lead poisoned by current CDC criteria. The most important source of lead exposure in these children is lead-based paint. Leaded paint chips are ingested directly by children causing acute lead poisoning. Much more common is the ingestion, during a child's normal mouthing behavior, of house dust and soil contaminated by weathered lead-based paint.

Previous and ongoing CDC efforts contribute to reducing lead exposure in children in several important ways:

- Under the authority of the Lead Contamination Control Act of 1988, CDC plans to spend $3.9 million in both 1990 and 1991 for the categorical grant program to expand support for screening of children for lead poisoning by State and local health agencies. The identification of children with lead poisoning helps identify those homes most in need of lead abatement efforts.

- CDC, with the help of expert committees, has issued lead screening, diagnosis, and treatment guidelines that are used by pediatricians and screening programs. Because recent well-conducted prospective studies have shown adverse health effects of lead in children at levels previously thought to be safe, CDC is convening an advisory committee to update the CDC statement, Preventing Lead Poisoning in Young Children. Revised guidelines are expected to be published by the beginning of 1991.

- CDC conducts epidemiologic studies on the relationship between exposure to environmental lead and blood lead levels and has a staff with expertise in environmental health and program management.

- CDC provides consultation and technical assistance to State and local government agencies and others on issues of lead exposure and prevention, and program development.

- CDC provides technical assistance to public health and other laboratories through proficiency testing and reference laboratory services, in order to ensure that lead poisoned children are accurately classified.

- CDC scientists work closely with other Federal agencies, both informally and through formal agreements, on housing related and other environmental issues.

- CDC is working to develop national surveillance for elevated blood lead levels. This will be useful not only for identifying which parts of the country have the greatest problems, but also for tracking our progress towards eliminating childhood lead poisoning.

INJURY CONTROL

Mr. Conte: Last year CDC sent to Congress a detailed report on the cost of injuries in America. It caused $157 billion in direct and indirect costs back in 1985 and it is surely much more today. This budget only asks for level funding at $23 million for injury control.

What will you be doing in injury control with the current budget?

Dr. Roper: Within the current budget in injury control, in fiscal year 1991 we will continue the present level of intramural activities and support the following grant programs:

- 40-45 prevention research grants
- 9-11 Injury Control Research Centers
- 28 State and large city/county health department capacity building grants in surveillance system and prevention program development and evaluation.

States also have the flexibility to use the Prevention Block Grant for injury control activities if such activities are considered a priority within the State.

Mr. Conte: How much more remains to be done to reduce preventable and intentional injuries?

Dr. Roper: In fiscal year 1989 significant findings and recommendations for action in injury control were released in the three following Reports to Congress and two other publications: 1) Cost of Injury in the United States: A Report to Congress, 2) Childhood Injuries in the United States, and 3) the Interagency Head Injury Task Force Report; as well as in 4) the Report of the Secretary's Task Force on Youth Suicide, and the book 5) Injury Prevention: Meeting the Challenge.

In 1991 CDC will address these needs by continuing to spend $23 million to support injury surveillance, research, and capacity building. We will highlight capacity building and intentional injury prevention. In the area of capacity building, the ability to assess injury-related problems and to implement efforts to reduce them should reside in each State and local public health agency. "Injury Prevention: "Meeting the Challenge" outlines the numerous injury preventions which need implementation and evaluation.

INFLUENZA CONTROL

Mr. Conte: This year we saw the emergence of yet another wave of a flu bug called A-Shanghai. Thousands of people died this time, especially the elderly.

Why is influenza control so difficult? I understand the flu bug can change its antigen makeup every so often.

Dr. Roper: Yes, that is correct. Influenza remains an important cause of morbidity and mortality largely because of the ability of the virus to rapidly change its surface antigens (proteins). This change can render vaccines made with other (previous) virus strains less effective, or in some cases even ineffective. This is the primary reason that control of influenza is not possible at the present time.

Mr. Conte: What is CDC doing to prepare for the next big epidemic?

Dr. Roper: First, through membership in the Interagency Working Group on Influenza, CDC has participated in the preparation of a "Plan for Pandemic Influenza". This plan outlines steps to be taken in the United States in the event that a new pandemic strain of influenza should arise. Second, on a routine basis, CDC monitors influenza viruses from all over the world for significant change. CDC has also recently expanded its program for detecting newly emerging strains by initiating a program for national influenza surveillance in the People's Republic of China. China was chosen because many previous influenza epidemics appear to have originated there. Detection of new viruses as they emerge is important if we are to have time to prepare effective vaccines against them. Third, in addition to traditional methods, CDC is applying "state-of-the-art" techniques, such as modern sequence analysis of epidemic strains. This allows health officials to monitor changes in influenza viruses in more detail and thus to make a better selection of vaccine strains.

EBOLA VIRUS

Mr. Conte: I heard about that deadly strain of Ebola virus that was brought into the U.S. with a shipment of monkeys. What is the status of this situation?

Dr. Roper: In November and December of 1989, infections caused by a filovirus closely related to Ebola virus were detected in cynomolgus monkeys imported from the Philippines and held in quarantine facilities in Virginia and Pennsylvania. No human illness compatible with that known to be caused by Ebola virus occurred in persons who came in contact with the infected animals in transit or in quarantine. As a result of the situation, Interim Guidelines for Handling Non-Human Primates in Transit and in Quarantine were developed by the CDC and published in the MMWR on January 19, 1990. All U.S. importers were notified of this potentially dangerous situation and surveillance of all newly imported monkeys was established. In late January and February, additional shipments containing filovirus infected monkeys were received by U.S. importers from the Philippines. A worker in one of these quarantine facilities was accidentally exposed to infected tissues while necropsying one of the dead monkeys. The worker has remained well during the 3 weeks since the exposure. The pathogenic potential in man of this newly recognized filovirus has not yet been determined. There may be numerous members of the filovirus family with a range of pathogenic potential circulating in Africa, Asia, and possibly in other parts of the world. Studies are being initiated to provide answers to some of these questions. In the meantime more definitive instructions/guidelines are being developed to further protect the workers handling monkeys in transit or in quarantine and to minimize the opportunities for spread of these infectious agents from monkey to man and from monkey to monkey while in quarantine.

POLIO

Mr. Conte: Can polio be eliminated as a world-wide disease?

Dr. Roper: The World Health Organization has set the Year 2000 as a target date for the global elimination of polio. We believe that this goal can be achieved with appropriate and timely assistance.

Mr. Conte: What would it take to eliminate polio?

Dr. Roper: Achieving the goal of global elimination of polio, will require that considerable technical, laboratory, and programmatic assistance be made available to WHO and its member countries. If the United States government provided these resources, it is estimated that $27 to $30 million in total over the next ten years would be required. However, CDC is not requesting additional funds for this purpose within the priorities of the 1991 budget, and no further offsets have been identified to accommodate such increases.

Mr. Conte: What are your current efforts to stop polio?

Dr. Roper: CDC has devoted considerable resources to both the scientific and operational aspects of poliomyelitis control in the developing world. The most notable achievements of date include:

- Development of practical laboratory manuals to facilitate and standardize laboratory diagnosis of poliomyelitis. Participation in the development of field manuals to facilitate and standardize surveillance practices and case investigation methods.

- Development and application of molecular techniques to study the regional and global patterns of spread of wild polioviruses.

- Investigation of outbreaks to study and clarify the epidemiologic features of poliomyelitis in well-vaccinated populations, and to calculate the protective efficacy of live, attenuated and enchanced-potency, inactivated poliovirus vaccines.

- Organization and direction of large-scale clinical trials of alternative formulations of oral poliovirus vaccines in the developing world.

Most of these activities were undertaken at the request of the Expanded Program on Immunization (EPI), Pan American Health Organization (PAHO), which began a formal initiative in 1985 to eradicate transmission of wild poliovirus infection in the Western

Hemisphere by the end of 1990. CDC has continued to play an active role throughout this initiative, with the contribution of more than 400 person-days per year in both laboratory and epidemiologic assistance. CDC has also responded to other requests for epidemiologic investigation, programmatic consultations, and technical assistance from a number of other countries during this period, in conjunction with both Regional and Headquarters Offices in the World Health Organization (WHO).

L-TRYPTOPHAN

Mr. Conte: What is going on with that outbreak related to L-tryptophan in health foods?

Dr. Roper: As of March 23, 1,417 cases had been reported to the CDC and 20 patients are known to have died. A series of studies is being conducted cooperatively, involving CDC, FDA, and a number of State Health Departments. The first set of epidemiologic studies have conclusively shown that L-tryptophan containing products are the vehicles carrying the etiologic agent of Eosinophilia-Myalgia Syndrome (EMS). However, that agent has still not been identified.

Current research is directed toward determining whether there is a specific common source of the L-tryptophan that caused illness. If there is such a source, an attempt will be made to review processing procedures at that location in order to see how a contaminant might have been introduced. Meanwhile, extensive chemical analyses of implicated tryptophan products are continuing at both CDC and FDA. A minor degree of contamination has been found in some products, but it is not clear whether any of the contaminating compounds found thus far is the etiologic agent. Their precise molecular identification and determination of their possible toxicities will take some time.

Mr. Conte: What control measures are being taken?

Dr. Roper: These are being undertaken by FDA and involve a recall of all L-tryptophan-containing products that are regulated as food supplements. Medically necessary uses of tryptophan are being permitted to continue and have, so far, not been associated with the occurrence of EMS cases.

NATIONAL ALZHEIMER'S EDUCATION PROGRAM

Mr. Roybal: In FY 1989, the Appropriations Conference Report stated that "the conferees are agreed that this amount provides sufficient funding for the National Alzheimer's Education Program which serves as an umbrella for the NIA's education center and clearinghouse efforts and coordinates and assists public private research, education and training activities." Would the Centers for Disease Control be able and willing to operate the National Alzheimer's Education Program in a manner similar to the successful National High Blood Pressure Education Program operated since the 1970s by the National Heart, Lung and Blood Institute in the National Institutes of Health?

Dr. Roper: An educational program for Alzheimer's disease would differ from the National High Blood Pressure Education Program. At present, we do not know the causes or risk factors for Alzheimer's disease -- aside from increased risk as one ages -- as we do for high blood pressure. Therefore, an educational program designed to prevent Alzheimer's disease could not be implemented.

An education program for family members and for patients who have early signs of Alzheimer's could be directed at identifying persons with Alzheimer's, reducing secondary disabilities in patients, and assisting family members in living with Alzheimer's patients by making information available to them about resources in their community. The Centers for Disease Control would be able to operate such an education program given the appropriate resources. However, we are not seeking the transfer of this program from the National Institute of Aging.

PREVENTION BLOCK GRANT

Mr. Roybal: The President's budget for the Prevention Block reflects no increase. The purchasing power of the prevention block has also declined 23% since 1983. Does this reflect a disinterest in prevention?

Dr. Roper: The Preventive Health and Health Services Block Grant was started in FY 1982 with a basic intent to supplement the State and local funding of preventive health programs and not to be the sole funding source. The block grant approach allows these State and local directed preventive programs to respond to the individual State's health priorities and needs. The funding requests here reflect the continuing concerns of the Federal budget deficits and competing priorities for any new resources.

Rather than disinterest, we found increasing interest in prevention at the State level. For example, recently enacted programs in California and Michigan have directed new resources to smoking prevention and general chronic disease prevention.

CDC has increased its efforts in the past year to gain more insight into the prevention services funded by this grant program. In our Report to Congress this year, the impact of these funds will be more fully described.

Mr. Roybal: Would the Department object to an increase in the funding for the prevention block grant and would the states be able to put increase funds to good use?

Dr. Roper: The opportunities for preventive health programs are numerous, and many different funding sources are utilized. The Preventive Health and Health Services Block Grant is one source of funding for State and local directed preventive programs. These funds supplement State and local resources. With the broad needs of preventive programs and with the new framework of the Year 2000 Health Objectives, additional funding could be used effectively to assist the efforts of State and local health agencies. However, CDC is not requesting such an increase within the priorities of the 1991 budget.

HUMAN IMMUNODEFICIENCY VIRUS

Mr. Roybal: The America Responds To AIDS education campaign is going to encourage Americans to be tested for HIV infection. If this campaign is successful, presumably there will be an increased demand on sites that offer HIV testing. How much additional demand has the CDC estimated the advertising campaign will generate?

Dr. Roper: The America Responds to AIDS campaign will encourage people to assess their own risk and, if at high risk of HIV infection, to seek counseling and testing. Therefore, there will most likely be an increase in demand above the current rate of growth for Counseling/Testing; however, CDC anticipates that the increase in demand for services, can be met with resources at the level requested for Counseling/Testing sites.

Mr. Roybal: How much additional money has been provided in the FY 91 budget to meet this increased demand?

Dr. Roper: The fiscal year 1991 President's budget request includes an additional $7,430,000 for counseling, testing, referral, and partner notification activities. This includes $4,054,000 for evaluation of alternate counseling approaches.

Mr. Roybal: Originally HIV testing was performed at alternative testing sites established to provide proper counseling along with the testing in an anonymous or confidential setting. Now a wide range of clinics seeing patients potentially at risk to HIV infection routinely offer HIV counseling and testing. What percentage of testing money has gone to ATS sites as opposed to other sites, such as STD clinics?

Dr. Roper: Funding information is not available by category of HIV testing site. However, other site-specific data are available. An analysis of testing data submitted by HIV/AIDS prevention programs from January 1988, through September 1989, indicates that 40 percent or 562,647 of all publicly funded HIV testing about 1,403,240 tests, has occurred in freestanding HIV counseling and testing sites, previously called alternative testing sites. These sites yield 50 percent or about 32,440 of the positive tests. STD clinics have accounted for 25 percent of testing and [illegible] percent of the positives. Average estimated test costs are $[illegible].00 per negative and $92.30 per positive. The number of reported freestanding HIV counseling and testing sites rose from 556 in the first quarter of 1988, to 1,297 in the third quarter of 1989; STD counseling and testing sites increased from 247 to 877 during the same time period.

Mr. Roybal: How has this changed over the last three years?

Dr. Roper: Funding data by type of test site are not available, and detailed counseling and testing data are only available since January 1988. However, reported data from Counseling/Testing sites for the 21-month period from January 1988, through September 1989, indicate greater increases for STD clinics than for freestanding counseling and testing sites or a 255 percent increase versus 133 percent, respectively in the number of test sites; a 451 percent increase versus 109 percent in the number of HIV tests, and a 146 percent versus 76 percent in the number of positive tests.

Mr. Roybal: What is the basis for this shift?

Dr. Roper: The greater HIV testing increase in STD clinics results from the expansion of HIV prevention services from the "dedicated" freestanding counseling and testing sites in the early years to a wider variety of existing sites that have integrated HIV prevention, including counseling and testing, into their services.

Mr. Roybal: How many tests have been performed at ATS locations?

Dr. Roper: From January 1988, through September 1989, 562,647 HIV-antibody tests were performed in freestanding HIV counseling and testing sites.

Mr. Roybal: At STD clinics and similar sites?

Dr. Roper: From January 1988, through September 1989, CDC received reports that the following HIV-antibody tests were performed in publicly-funded sites: 353,643 in STD clinics; 84,752 in private physicians' offices; 65,838 in family-planning clinics; 55,853 in prisons; 47,834 in prenatal/obstetric clinics; 36,198 in other public health department clinics; 18,632 in drug-treatment centers; 14,738 in colleges; 10,974 in tuberculosis clinics; 108,340 in other non-health department sites; and 43,791 in unclassified sites.

Mr. Roybal: How many of the individuals tested have returned for their results -- at ATS locations and at other sites?

Dr. Roper: The largest percentage or 63 percent of individuals returning for HIV test results - as measured by the reported number of post-test counseling sessions - was recorded in freestanding HIV counseling and testing sites. The other percentages of individuals who returned for test results were: 47 percent in TB clinics; 45 percent in drug treatment clinics; 25 percent in prenatal/obstetric clinics; 22 percent in family-planning clinics; 21 percent in STD clinics; 19 percent in other health department clinics; 16 percent in prisons; 8 percent in colleges; 7 percent in other non-health department sites; 4 percent in private physician offices/clinics (though, we think this is undoubtedly a reporting problem) and 1 percent in unclassified sites.

Mr. Roybal: What explanation can be offered for this discrepancy?

Dr. Roper: A higher percentage of persons probably return for test results in freestanding HIV counseling and testing sites versus all others sites because persons being tested at freestanding sites have gone to that type of facility for the sole purpose of receiving HIV-antibody tests. Therefore, they are probably more motivated to return for those results. However, at all of the other sites, persons are probably receiving HIV-antibody testing in addition to the other services usually supplied by that site for example, a client attending an STD clinic for treatment of gonococcal urethritis is identified as high-risk, receives HIV education and pretest counseling in the course of his visit, and agrees to be tested; however, after leaving the clinic he may decide that he does not need or does not want to obtain the results of the HIV test. We should note that the extremely low "return rate" for private physician offices/clinics is probably due more to incomplete reporting than actual failure to return for test results.

Mr. Roybal: The CDC provides funding for counseling and testing for HIV antibodies. It is also my understanding that in order to evaluate fully an individual's condition, if he or she test positive, CD-4 or T-cell testing is also required. Does the CDC permit States or clinics to use their testing dollars to pay for such immune testing? If not, why not?

Dr. Roper: While CDC supports public health laboratory training and quality assurance and performance evaluation programs for CD4t testing, it does not provide direct funds for actual testing services since neither the testing nor the recommended treatment which may follow has been proven to decrease potential transmission of HIV. Some States and localities, however, supply their own funding for CD4+ testing, while many refer patients to private and other public providers for testing.

Mr. Roybal: How can a counselor properly explain the meaning of a positive antibody testing without this additional information? (Particularly since part of the evaluation of laboratories that the CDC is proposing includes providing training on CD-4 testing.)

Dr. Roper: When counselors explain the meaning of positive HIV-antibody tests, they also counsel patients on the next step in the process, having their a physician periodically monitor the functioning of their immune system through the CD4+ test. We feel that physicians, not counselors, would be the most likely professional to explain results of CD4+ testing to a person with HIV infection.

Mr. Roybal: The CDC has requested $3,475,000 to expand HIV-related laboratory training and quality assurance. What is the total amount of money spent by the CDC in this area?

Dr. Roper: The total amount allocated by CDC to HIV-related laboratory training and quality assurance and performance evaluation during fiscal year 1990 is $7,245,994.

Mr. Roybal: What have been the results of the most recent CDC laboratory quality assurance survey?

Dr. Roper. The CDC's Model Performance Evaluation Program has provided performance evaluation panels containing human immunodeficiency virus type 1 - HIV-1 - antibody-positive and negative specimens to the approximately 1400 laboratories that participate in this program. Currently, the laboratories test these specimens by enzyme immunoassay - EIA -, Western blot - WB -, indirect immunofluorescence - IIF - and other tests and then furnish their results to CDC. Additionally, these laboratories are requested to complete survey questionnaires that provide CDC with details on the type of laboratory, how it treats specimens, test controls that are used, and the types of tests it performs. Results for calendar year 1989 indicate that performance has improved and that more than 99 percent of the laboratories performed well in testing their performance evaluation samples. Less than one percent of the laboratories reported nonreactive results by EIA, WB, and IIF for positive samples. Likewise, less than one percent of laboratories reported reactive results by EIA, WB, and IIF, for negative samples that represent donor material from persons who have not been infected by HIV-1. Additionally, less than one percent of the laboratories incorrectly tested their HIV-1 samples with kits manufactured for testing human T-lymphotropic virus I and II - HTLV-I/II -, which is a different retrovirus from HIV-1. Examination of the survey questionnaires completed by the laboratories showed that some laboratories require only in-house training to conduct these tests, may not have guidelines established to reject a specimen that may be unsuitable for testing, and may lack the necessary quality control standards that would allow them to detect variability in manufactured kits or laboratory errors in performing the manual or automated procedures. CDC has concluded that, because of the evolving array of tests and testing procedures, future performance evaluation specimens sent on a periodic basis are necessary, and that improvements in quality control procedures are necessary to insure the accuracy of retroviral testing.

Mr. Roybal: As the amount of testing expands and more laboratories get involved, does the CDC anticipate any quality control problems.

Dr. Roper: As testing for HIV-1 infection increases in scope and volume, so too will the potential for quality control problems. The quality of laboratory testing performance depends on the intrinsic quality of testing methods, the ability of laboratorians performing the tests, and the adequacy of quality control measures. Research is currently being conducted at CDC to understand the degree to which numerous factors, such as method used for testing, amount of training, workload, and amount of testing experience, etc., affect the performance of laboratory testing. This research is being conducted through the Model Performance Evaluation Program using performance evaluation and laboratory demographic data voluntarily provided by the approximately 1400 participating laboratories. To help ensure high quality testing for HIV-1 antibody, the program maintains an ongoing effort to recruit new laboratories. Participation in an external performance evaluation program is sometimes the only independent evaluation of the laboratory and should be considered a vital element of laboratory quality control. Participation provides laboratorians with valuable information that can be used for identification and self-resolution of testing problems and serves as a source for useful information about changes in testing practices.

Mr. Roybal: Are there sufficient funds in the President's request to address this problem?

Dr Roper: We believe that the funds requested for fiscal year 1991 will be adequate to support laboratory training and quality assurance and performance evaluation for laboratories performing HIV-related testing during that year. There is a need to continue to support laboratory training and performance evaluation activities into the 1990's. We anticipate that expansion of counseling and testing activities, and the addition of new, HIV-related tests to the repertoire of tests offered by public health laboratories, will require ongoing efforts to train laboratorians and to assure the quality of laboratory test results which support HIV prevention programs.

Mr. Roybal: The Committee has expressed its desire to see much of the HIV prevention and education money reach community based organizations. Much of the money appropriated to the CDC in this area is passed on to State and local governments. I am concerned that some State health departments use these funds to increase the size of their bureaucracies rather than increase the education power of the community based organizations. Can you provide for the record, the total amount of education and prevention money distributed to State and local governments in FY 1989.

Dr. Roper: In fiscal year 1989, $134,477,776 was awarded for HIV prevention with State and local health departments and $19,601,313 was awarded to State and local education agencies.

Mr. Roybal: The number of government FTE positions and their cost paid for with these grants and cooperative agreements.

Dr. Roper: In fiscal year 1989, a total of $38,658,575 - was awarded to support approximately 2,000 federal, state, and local personnel through these grants and cooperative agreements. It is important to note, however, that much of these funds support positions providing direct preventive and education services rather than administrative support.

Mr. Roybal: The total amount of money distributed to community-based organizations by State and local governments through these grants.

Dr. Roper: During fiscal year 1989, $22,627,484 was awarded to more than 556 community-based organizations, including minority and other CBOs and AIDS service organizations, through the HIV prevention and surveillance cooperative agreements with State and local health departments. This excludes the $9.9 million that was directly awarded to minority and other community-based organizations by CDC.

Mr. Roybal: Because of smaller than anticipated growth in their budgets, some other agencies, such as the NIH, have had to reduce the size of contracts and grants in their out years. Is the CDC experiencing a similar problem with some of the its grants and contracts, such as for the national AIDS Hotline and the National AIDS Information Clearinghouse?

Dr. Roper: CDC has not reduced the operational levels of either the National AIDS Hotline or the National AIDS Information Clearinghouse contracts.

Mr. Roybal: In the instance where contracts are reimbursed based on demand for services, have sufficient funds been requested in the President's budget to cover any unanticipated increases?

Dr. Roper: The National AIDS Hotline and the National AIDS Information Clearinghouse contracts are indeed driven by demand. CDC has projected an estimate of this demand for fiscal year 1991 and the President's budget contains increases to sustain core operations.

Mr. Roybal: What level of evaluation is required in all federally funded HIV prevention and education grants -- whether provided directly to a contractor or indirectly through a State or local government?

Dr. Roper: CDC requires that all HIV/AIDS prevention funding recipients have an approved plan for evaluation of all activities. These evaluation plans are based on specific, measurable, time-phased, objectives related to the impact upon the target group, the measurement of specific expected outcomes, and the evaluation of those processes necessary to achieve the approved objectives. The recipients are required to submit periodic progress reports to CDC in a narrative format. Progress is also noted and technical assistance provided during site visits by CDC project officers, through formal program reviews by CDC staff, and through other communications.

The CDC provides State and local education agencies with fiscal and technical assistance to assist these agencies in developing, implementing, and evaluating HIV prevention education programs for school-aged youth. Through cooperative agreements, each agency is encouraged to assess program activities in areas such as teacher and administrator training, classroom instruction, parent and community education, program policies, and programs for out-of-school youth. In addition, each agency is encouraged to measure changes in students' HIV-related knowledge, beliefs, and behaviors through the use of school-based surveys. Agencies are required to submit periodic progress reports to CDC. Progress is also noted and technical assistance provided during site visits by project officers.

Mr. Roybal: Has the CDC considered a requirement that all education and prevention grants include a set aside for evaluation, with the CDC providing technical assistance to those inexperienced in evaluation?

Dr. Roper: Although CDC has not considered requiring a specific set aside, it is estimated that approximately 10 percent of CDC's HIV prevention funds are allocated to evaluation activities.

Mr. Roybal: There seems to be overlapping jurisdiction between the CDC and NIDA regarding working with drug users in preventing AIDS. Which is the lead agency and how are efforts being coordinated?

Dr. Roper: CDC is the lead agency in the Public Health Service for HIV prevention and, as such, has a role in preventing HIV among intravenous drug users . CDC collaborates with other PHS agencies, such as ADAMHA and HRSA, to ensure that efforts are coordinated and that duplication of efforts is avoided. CDC supports HIV counseling, testing, referral, and partner notification programs in drug treatment programs through the HIV prevention and surveillance cooperative agreements with State and local health departments. To ensure coordination at the local level, CDC encourages cooperative agreement recipients to collaborate with drug abuse agencies in developing joint plans to address HIV prevention among IVDUs. In FY 1989, $20 million was spent for counseling, testing, and partner notification programs in drug treatment centers; in FY 1990, approximately $25.2 million has been budgeted.

CDC supports HIV prevention street outreach programs for IVDUs and their sexual partners that: 1) promote cessation of drug use, 2) refer drug users for treatment and other appropriate medical services; 3) counsel IVDUs to cease or reduce needle-sharing practices; 4) promote the use of bleach; and 5) provide other risk-reduction messages including the adoption of safer sexual behavior practices. These programs are supported though cooperative agreements with State and local health departments and by financial and technical assistance provided directly to community-based organizations or indirectly through the U.S. Conference of Mayors. CDC has provided its support for HIV prevention street outreach programs primarily in the most heavily affected States and cities not funded by NIDA's AIDS Outreach Demonstration Research Projects.

CDC and NIDA jointly plan HIV prevention projects related to drug users and share information and research findings. CDC and NIDA staff and researchers are collaborating to report results in peer review journals of the effectiveness and potential benefits of street outreach programs in HIV prevention.

NIDA staff have participated with CDC in reviewing applications submitted by competing CBOs for direct CDC funding.

MINORITY HEALTH

Mr. Stokes: Can you tell us about new initiatives that CDC plans to undertake in the area of minority health?

Dr. Roper: CDC's new initiatives for addressing the minority health issues are:

- Encourage the establishment of a minority health office in each State health department.
- Develop State specific data tapes on minority health.
- Coordinate public health objectives with State minority health offices.
- Assessment of the need for minority health activity within academia.

- Develop a Cooperative Agreement with the Foundation of Association of Minority Health Professions Schools (AMHPS).
- Develop exchange program for minority faculty interested in public health at CDC.
- Develop a listing of major targeted agencies for educational/health initiatives.
- Develop minority health projects in various minority populations.
- Develop action plan for minority health in the voluntary agency community.
- Determine a method for monitoring program effectiveness at State, local government, and CBO level.
- Encourage an effective Affirmative Action Program at CDC.
- Implement a support mechanism for professional development of minority employees at CDC.
- Encourage the professional advancement of minority employees at CDC.
- Incorporate minority health in State and local health initiatives in government and non-government agencies.
- Solicit participation from voluntary agencies at State and local levels in minority health.
- Coordinate Federal, State, and local government programs in health services.
- Staff the Minority Health Grant Review Committee.
- Encourage minority investigators to respond to RFP's and cooperative agreements from CDC.
- Encourage publication from minority investigators at CDC.

MINORITY EMPLOYMENT

Mr. Stokes: How many minorities are employed by CDC?

Dr. Roper: As of the end of the first quarter of Fiscal Year 1990, CDC, not including ATSDR, employed 1102 minorities. Of the 1102, 923 are black. This number includes only those staff who are on some type of permanent employee status, it does not reflect persons on temporary appointments, visiting scientists, or other limited appointments. The base data used in this response are the CDC and ATSDR Affirmative Employment Tracking Data System.

Mr. Stokes: What percentage of the total does this represent?

Dr. Roper: The 1102 permanent status minority persons employed at CDC as of the end of first quarter FY 90 represents 22% of the total base of permanent status employees. Among minority employees, 84% are black.

Mr. Stokes: How many minorities are represented at grades GS/GM 14 and above?

Dr. Roper: Using the CDC and ATSDR Affirmative Employment Tracking Data System base of permanent employees, there are a total of 1614 employees at the GS/GM 13 to 15 and Commissioned Officers O-5 and above. Of these, 145 are minorities or 8.9% .

When we consider only GS/GM 14 and above employees (both civil service and commissioned corps) , there are a total of 937 persons employed of whom 70 are minorities (7.5%).

EQUAL EMPLOYMENT OPPORTUNITY GOALS

Mr. Stokes: Please explain what efforts CDC has made in furthering the goals of Equal Employment Opportunity?

Dr. Roper: CDC is fully committed to the goals of equal employment opportunity and affirmative employment. Progress over the past 10 years in the representation of women and minorities in our workforce reflects this commitment. In 1978, 38.8% of the CDC workforce were women and 13.4% were minorities. In 1988, women represented 50.7% of the workforce and minorities 20.5%. Now our permanent workforce is over 22% minority.

During that same 10-year period at the senior grade level jobs, i.e., GS/GM 13 to 15 and commissioned officers O-5 and O-6, representation among women rose from 9.9% to 22.3%, and minorities rose from 3.6% to 8.8%. The changes we have witnessed in the society at large have been mirrored within CDC - many more women and minorities are assuming high level positions.

CDC has been pursuing for the past five years a number of collaborative arrangements that have broadened our visibility within minority professional schools. For example, we now manage several cooperative agreements with the Association of Minority Health Professional Schools (AMHPS) that are intended,in part, to influence minority scientists to consider careers at CDC. Since 1982 we have brought in under project IMHOTEP undergraduate black students on a full-time employment basis to CDC for training in biostatistics, data processing and epidemiology.

We are also preparing CDC female and minority employees for higher level positions by:

- Aggressively pursuing black medical students as candidates for the Epidemic Intelligence Service (EIS) training program;
- Increasing the number of black and hispanic entrants into the public health advisor series (over 40% of last years class was black men and women);

- o Providing family assistance programs that make it easier for parents to work. We opened a child day care center last year and provide child care assistance through a progessive day care program referral program.
- o Encouraging active participation in several management development programs that are intended to "fast track" future managers by exposing them to a experiences and formal course work that will allow them to move into more responsible positions earlier;
- o Maintaining a diverse, active and very accessible intramural training program for all employees.
- o Emphasizing participation of minorities and women employees in long term and other training opportunities;

WOMEN and MINORITIES

Mr. Stokes: How does CDC plan to find and retain qualified women and minorities in view of stiff competition from the private sector and the decreasing numbers of minorities in the sciences?

Dr. Roper: CDC faces difficult challenges in competing with the private sector for minorities with the necessary skills. In the past decade, barriers to recruitment and progress of minorities and women at CDC have dissolved. We are now emphasizing ways to manage a progressively more diverse workforce and to assure that they become fully represented at the senior scientific and management levels.

By providing a supportive atmosphere and satisfying work experience and through the contacts we are developing at minority schools, minority professional associations, we believe we can find, recruit and retain the minority employees we seek.

CDC is already involved in a number of programs that are wholly or in part focused on developing minority students for careers in science and public health.

By expanding our involvement in minority career development programs we believe that the number of minorities trained in science and public health can be accelerated. We are participating in a number of programs. Among them are:

- o The Minority Access to Research Careers (MARC),
- o The Minority Biomedical Research Support (MBRS),
- o Commissioned Officer Student Training and Extern Program (COSTEP),
- o The CDC/Emory/Morehouse Public Health Fellows Program,
- o Project IMHOTEP (a statistical and epidemiologic training program),

- o The Summer Educational Experience for the Disadvantaged (SEED)
- o CDC adopted a predominately black school through the Adopt-A-School program. The relationship has been mutually beneficial and is becoming a point of honor within CDC.
- o We have established a cooperative agreement with the Association of Minority Health Professional Schools to assist in developing and implementing a coordinated plan to expand educational and research opportunities in the health professions.

CDC has been pursuing for the past five years a number of collaborative arrangements that have broadened our visibility within minority professional schools. For example,

- o We now manage several cooperative agreements with the Association of Minority Health Professional Schools (AMHPS) that are intended to influence minority scientists to consider careers at CDC.
- o Since 1982 we have brought in under project IMHOTEP undergraduate black students on a full-time employment basis to CDC for training in biostatistics, data processing and epidemiology.
- o For the past few years we have been fortunate to place a number of Presidential Management Interns, many of whom have been minorities and women, in planning, management and public policy positions.

There are other activities that will help us attract more minority public health advisors, scientists, physicians and management trainees. For example, we expect to be:

- o Seeking to influence curriculum revisions or enhancements with funding from CDC;
- o Conducting more exchange workshops and educational symposia with faculty from minority schools;
- o Establishing liaison positions with each school and faculty;
- o Expanding managers awareness of their role in pursuing minority recruitment and in fostering a workplace conducive to a multicultural workforce;
- o Expanding the scope of our agreements with minority schools and professional organizations;
- o Expanding the number of summer work experiences for minority students enrolled in undergraduate science programs;
- o Providing a greater variety of faculty and student exchanges.

- o Providing more faculty summer and/or sabatical research and training opportunities;
- o Making summer internships widely available through joint CDC-minority professional school and undergraduate science schools;
- o Creating student educational and cooperative training programs.

Through these and other activities we are building a comprehensive program with elements directed towards primary, secondary, undergraduate, graduate and postgraduate levels, as well as, on-the-job training, that will be required to produce the highly motivated, well prepared workforce CDC needs to carry out its programs - especially those directed towards the special health problems of minorities and women.

Mr. Stokes: What resources would be needed to support your efforts in this area?

Dr. Roper: In 1991, CDC expects to spend in excess of $100,000 on specific recruitment and retention efforts directed toward women and minorities.

AIDS COOPERATIVE AGREEMENTS

Mr. Stokes: How does CDC intend to maintain the existing direct AIDS cooperative agreements it now holds with localities and community-based organizations?

Dr. Roper: Through existing cooperative agreements, CDC intends to maintain direct funding to the six currently-funded cities and 72 community-based organizations (CBOs). In addition, it is expected that another 30 minority CBOs will be funded directly in fiscal year 1990.

Mr. Stokes: Has the CDC set-aside dollars in its FY 1991 budget for direct funding?

Dr. Roper: Yes, CDC has set aside funds in its fiscal year 1991 budget for direct funding of CBOs and those six cities. Approximately $25 million will be awarded through such direct funding in 1991.

Mr. Stokes: Does your budget request allow CDC to fund the direct cooperative agreements with cities as well as carry out the directive from congress to increase funding to States for Block grants?

Dr. Roper: Yes, the budget request allows CDC to continue direct funding of those cities.

CHILDHOOD LEAD POISONING

Mr. Stokes: Last year, Dr. Houk spoke to us very frankly about the effect of lead poisoning on our children. Children throughout the country are affected by lead. However, childhood lead poisoning disproportionately affects poor, inner city, minority children. Last year Congress appropriated $4 million for a lead poisoning prevention program at CDC. Please apprise us of the status of this program.

Dr. Roper: The grant program will support comprehensive screening and follow-up programs in 3 to 6 States, counties, or cities with a demonstrated severe childhood lead poisoning problem. CDC expects to publish a Federal Register notice on the availability of funds in April 1990 and expects funds to be distributed by September. In the meantime, CDC staff have been consulting with State and local agencies and others to provide consultation on childhood lead poisoning prevention. CDC will continue to provide technical assistance to both funded and nonfunded programs.

Mr. Stokes: How much is requested for FY 1991 for this program? What will this enable you to do in this area?

Dr. Roper: For FY 1991, the President's budget includes $3,949,000 for support of the childhood lead poisoning prevention program, the same as that appropriated in FY 1990. CDC will be able to continue support of the 3 to 6 States, counties, or cities that will receive grants in FY 1990. CDC will continue to maintain its current level of effort to reduce childhood lead exposure.

Mr. Stokes: Will the CDC program be coordinated with lead abatement efforts supported by HUD?

Dr. Roper: CDC has a cooperative working relationship with HUD. In 1988, the National Institute of Building Sciences (NIBS) received a contract from HUD to develop guidelines for lead-based paint testing and abatement in public and Indian housing. CDC participated in the development of these guidelines, which were delivered to HUD in February 1989. Since then, CDC has continued to work with HUD on revising and reviewing the guidelines. Release of these guidelines is expected in April 1990.

CDC also participates in a number of interagency working groups that address issues related to childhood lead poisoning and lead-based paint in housing. These include a HUD-EPA task force to examine issues related to lead-based paint and a special subcommittee to evaluate implementation of the recommendations of the Report to Congress on The Nature and Extent of Childhood Lead Poisoning by the Agency for Toxic Substances and Disease Registry.

HUD has a demonstration project designed to evaluate alternative methods of lead-based paint abatement. CDC has been evaluating worker exposure at these projects. On the basis of data collected to date, CDC has provided HUD with interim recommendations. Involvement in this project is ongoing.

Mr. Stokes: Are any other agencies or departments involved in this effort?

Dr. Roper: In addition to the Department of Housing and Urban Development, there are a number of Federal agencies or departments involved in cooperative efforts to prevent childhood lead poisoning. The Environmental Protection Agency supports a 3-city demonstration program to determine the contribution of lead in soil to blood lead levels, in addition to other efforts directed toward eliminating environmental lead in air and water. Regulatory actions by the Food and Drug Administration have reduced lead in food, serving-storage dishes, and food containers. The Consumer Product Safety Commission has limited the amount of lead in consumer paints, furniture and toys. Health Resources and Services Administration and the National Institute of Environmental Health Sciences, also have agendas that focus on limiting exposure to lead.

Mr. Stokes: In your professional opinion, what is necessary to eliminate this problem?

Dr. Roper: Removal of the lead hazards from a child's environment is the only permanent solution to the problem. Identifying and treating children after they have become poisoned is only an interim measure affecting those who have already been exposed. A major impediment to eliminating this disease is abating lead-contaminated paint and lead-contaminated dust and soil from older housing. It is essential that public and private funds be made available for abatement, and unless abatement is tied to public health programs designed to identify children at risk for lead poisoning, we will continue to have lead poisoned children for generations to come.

Mr. Stokes: What is the full authorized amount of this program for FY 1991? How much could CDC use effectively?

Dr. Roper: The Lead Contamination Control Act of 1988 authorized $24 Million for FY 1991. While it is always possible to expand current activities, CDC is not requesting additional funds for this purpose within the priorities of the 1991 President's budget.

Mr. Stokes: I understand that TB continues to disproportionately impact racial and ethnic minorities. About two-thirds of all cases occur in minority populations. In 1988, when compared to non-hispanic whites, the risk of developing TB in blacks was 7 times higher. What is CDC doing about this?

Dr. Roper: Tuberculosis is an ongoing major public health problem in many of our Nation's cities and metropolitan areas, particularly in the inner city areas where large numbers of minorities and foreign-born reside. The Centers for Disease Control directs the TB prevention and control cooperative agreement program funds primarily to the Nation's inner cities because of the intense problems related to TB in these areas. Most of the funds are used to hire outreach workers whose major responsibility is to provide follow-up and directly-observed therapy for TB patients.

Health departments frequently report success stories on the performance of outreach workers hired through this program. About two-thirds of the outreach workers in the program are hired from the ethnic/cultural populations they serve. They spend much of their time in the field locating patients in inner city housing projects, streets, alleys, taverns, and even in illicit drug galleries.

TB ELIMINATION

Mr. Stokes: How much progress is CDC making to eliminate T.B. from the United States?

Dr. Roper: Elimination of TB from the United States will require a committed partnership between the Federal, State and local governments, the private sector, voluntary organizations, and patient advocacy groups. Considerable progress has been made in forging these partnerships. At the Federal level, CDC, FDA, NIAID, HRSA, IHS, and the Office of Refugee Health will continue to work together to achieve TB elimination. The Strategic Plan for the Elimination of Tuberculosis in the United States has been very well accepted. The plan has already been endorsed by the American Medical Association, the American Public Health Association, the American Lung Association, and the American College of Preventive Medicine. In addition, 14 areas have already established TB elimination advisory committees and two States and three large cities have developed area-specific plans.

The Centers for Disease Control is also working with health departments to strengthen their prevention and control efforts. In collaboration with State and local health departments, CDC has developed three data information systems to monitor progress towards achievement of our elimination goal. The first is an individual case reporting system; the second is the number of deaths from TB reported to the National Center for Health Statistics (CDC), and the third is a system for obtaining program performance data from State and local health departments.

The additional $1.8 million made available for FY 1990, for a tuberculosis total of $13,7 million will be used to continue implementation of the Plan. This will include additional targeting of resources to those most affected by TB, e.g., racial and ethnic minorities, the homeless; immigrants and refugees.

Mr. Stokes: How much will it cost to reach total elimination?

Dr. Roper: The following table shows estimated budgets for CDC, FDA, and NIH/HIAID that would be needed to fully implement the Plan. All monetary figures represent 1990 dollars. Given competing priorities, though,CDC and NIH plan to spend $21 million in 1991 toward implementation of the strategic plan to eliminate TB.

TUBERCULOSIS--COSTS

Year(s)	CDC $ (Yr.*)	FDA $ (Yr.*)	NIAID $ (Yr.*)	Total Expenditures
1990	$36.0	$3.5	$16.0	$55.5
1991-1994	144.0(36.0)	5.6(1.4)	64.0(16.0)	213.6
1995-1997	18.9(6.3)	0	24.0(8.0)	42.9
1998-2000	9.3(3.1)	0	1.5(0.5)	10.8
2001-2010	15.0(1.5)	0	0	15.0
Totals (Million)	$223.2	$9.1	$105.5	$337.8

*Annual Budget

YEAR 2000 HEALTH OBJECTIVES

Mr. Stokes: What amount is requested for prevention activities to meet the Year 2000 Health Objectives? How does this compare to the FY 1990 level for Prevention?

Dr. Roper: Since CDC is the lead agency in the Public Health Service for prevention, all of our budget is dedicated to our mission of improving the quality of life for all Americans by preventing unnecessary disease, disability, and premature death and by promoting healthy lifestyles. This mission includes the study and prevention of chronic diseases; controllable risk factors such as poor nutrition, smoking, lack of exercise, high blood pressure, stress, and drug misuse; infectious diseases; and injury or disease associated with environmental, home, and workplace hazards. Although not all of our budget is targeted to specific Year 2000 Objectives, the Objectives encompass the majority of CDC's programs. For FY 1991, our budget request is $1,172 million, an increase of $81 million over our FY 1990 appropriation of $1,090 million.

Mr. Stokes: In your opinion, does this amount reflect a commitment to promoting health and preventing disease? (S-20)

Dr. Roper: CDC is strongly committed to promoting health and preventing disease. Our FY 1991 budget request of $1,172 million will allow us to expand our efforts in reducing infant mortality and to enhance and expand our programs in HIV/AIDS prevention.

HUMAN IMMUNODEFICIENCY VIRUS AGENCY COLLABORATION

Mr. Stokes: I understand that CDC just recently collaborated with ADAMHA to fund a first ever joint PHS meeting on targeted AIDS prevention, bringing together researchers and service providers in the primary AIDS prevention arena with the PHS Agencies. I believe this is a step in the right direction. What kinds of initiatives are needed to promote closer collaboration between research and services?

Dr. Roper: CDC, ADAMHA, HRSA, and the National AIDS Program Office have agreed to host a meeting for State health officers and drug agency directors. The National Association of State Alcohol and Drug Abuse Directors and Association of State and Territorial Health Officials will invite their constituents to the meeting, tentatively scheduled for September, 1990 to discuss HIV prevention in drug treatment centers, outreach to drug users, behavior change and medical follow up of infected drug users, and the inclusion of drug users in medical care delivery system. PHS will provide coordination and assistance in developing plans for implementing action on these issues.

Mr. Stokes: Where is this collaboration best housed administratively (ADAMHA, CDC, or the National AIDS Program Office?)

Dr. Roper: Coordination and collaboration of AIDS activities are best operated within the National AIDS Program Office (NAPO). NAPO is the PHS staff component responsible for coordinating and integrating PHS efforts to prevent and control the spread of AIDS and HIV infection. Therefore, initiatives such that explained above are best coordinated at the PHS level.

Mr. Stokes: What kind of funding levels would be required to adequately support such programs in FY 1991?

Dr. Roper: The PHS FY 1991 request of $1.7 billion will support activities related to the fight against AIDS and HIV infection, as you have pointed out. This request includes increases in research, prevention, and service activities which includes initiatives to coordinate efforts of the PHS agencies.

HUMAN IMMUNODEFICIENCY VIRUS ALTERNATIVE SITES

Mr. Stokes: Originally HIV testing was performed at alternative testing sites established to provide proper counseling along with testing in an anonymous or confidential setting. Now a wide range of clinic seeing patients potentially at risk to HIV infection routinely offer HIV counseling and testing. What percentage of testing funds has gone to the alternative sites, compared to the other sites, such as STD clinic? How has this changed the last three years?

Dr. Roper: Funding information is not available by category of HIV testing site. However, other site-specific data are available. An analysis of testing data submitted by HIV/AIDS prevention programs from January 1988, through September 1989, indicates that 40 percent or 562,647 of all publicly funded HIV testing about 1,403,240 tests, has occurred in freestanding HIV counseling and testing sites, previously called alternative testing sites. These sites yield 50 percent or about 32,440 of the positive tests. STD clinics have accounted for 25 percent of testing and 19 percent of the positives. Average estimated test costs are $43.00 per negative and $92.30 per positive. The number of reported freestanding HIV counseling and testing sites rose from 556 in the first quarter of 1988, to 1,297 in the third quarter of 1989; STD counseling and testing sites increased from 247 to 877 during the same time period.

Mr. Stokes: How many tests have been performed at alternative sites? How many at STD clinics and similar sites?

Dr. Roper: From January 1988, through September 1989, 562,647 HIV-antibody tests were performed in freestanding HIV counseling and testing sites.

Mr. Stokes: How many of the individuals tested have returned for their results -- at ATS locations and at other sites?

Dr. Roper: The largest percentage or 63 percent of individuals returning for HIV test results - as measured by the reported number of post-test counseling sessions - was recorded in freestanding HIV counseling and testing sites. The other percentages of individuals who returned for test results were: 47 percent in TB clinics; 45 percent in drug treatment clinics; 25 percent in prenatal/obstetric clinics; 22 percent in family-planning clinics; 21 percent in STD clinics; 19 percent in other health department clinics; 16 percent in prisons; 8 percent in colleges; 7 percent in other non-health department sites; 4 percent in private physician offices/clinics (though, we think this is undoubtedly a reporting problem) and 1 percent in unclassified sites.

HUMAN IMMUNODEFICIENCY VIRUS LABORATORY TRAINING

Mr. Stokes: The CDC has requested $3.5 million to expand HIV-related laboratory training and quality assurance. What is the total amount of money spent by the CDC in this area?

Dr. Roper: The total amount allocated by CDC to HIV-related laboratory training and quality assurance and performance evaluation during fiscal year 1990 is $7,245,994.

Mr. Stokes: What have been the results of the most recent CDC laboratory quality assurance survey?

Dr. Roper: The CDC's Model Performance Evaluation Program has provided performance evaluation panels containing human immunodeficiency virus type 1 - HIV-1 - antibody-positive and negative specimens to the approximately 1400 laboratories that participate in this program. Currently, the laboratories test these specimens by enzyme immunoassay - EIA -, Western blot - WB -, indirect immunofluorescence - IIF - and other tests and then furnish their results to CDC. Additionally, these laboratories are requested to complete survey questionnaires that provide CDC with details on the type of laboratory, how it treats specimens, test controls that are used, and the types of tests it performs. Results for calendar year 1989 indicate that performance has improved and that more than 99 percent of the laboratories performed well in testing their performance evaluation samples. Less than one percent of the laboratories reported nonreactive results by EIA, WB, and IIF for positive samples. Likewise, less than one percent of laboratories reported reactive results by EIA, WB, and IIF, for negative samples that represent donor material from persons who have not been infected by HIV-1. Additionally, less than one percent of the laboratories incorrectly tested their HIV-1 samples with kits manufactured for testing human T-lymphotropic virus I and II - HTLV-I/II -, which is a different retrovirus from HIV-1. Examination of the survey questionnaires completed by the laboratories showed that some laboratories require only in-house training to conduct these tests, may not have guidelines established to reject a specimen that may be unsuitable for testing, and may lack the necessary quality control standards that would allow them to detect variability in manufactured kits or laboratory errors in performing the manual or automated procedures. CDC has concluded that, because of the evolving array of tests and testing procedures, future performance evaluation specimens sent on a periodic basis are necessary, and that improvements in quality control procedures are necessary to insure the accuracy of retroviral testing.

Mr. Stokes: As the amount of testing expands and more laboratories get involved, does CDC anticipate any quality control problems?

Dr. Roper: As testing for HIV-1 infection increases in scope and volume, so too will the potential for quality control problems. The quality of laboratory testing performance depends on the intrinsic quality of testing methods, the ability of laboratorians performing the tests, and the adequacy of quality control measures. Research is currently being conducted at CDC to understand the degree to which numerous factors, such as method used for testing, amount of training, workload, and amount of testing experience, etc., affect the performance of laboratory testing. This research is being conducted through the Model Performance Evaluation Program using performance evaluation and laboratory demographic data voluntarily provided by the approximately 1400 participating laboratories. To help ensure high quality testing for HIV-1 antibody, the program maintains an ongoing effort to recruit new laboratories. Participation in an external performance evaluation program is sometimes the only independent evaluation of the laboratory and should be considered a vital element of laboratory quality control. Participation provides laboratorians with valuable information that can be used for identification and self-resolution of testing problems and serves as a source for useful information about changes in testing practices.

Mr. Stokes: Are there sufficient funds in the president's request to address this problem?

Dr Roper: We believe that the funds requested for fiscal year 1991 will be adequate to support laboratory training and quality assurance and performance evaluation for laboratories performing HIV-related testing during that year. There is a need to continue to support laboratory training and performance evaluation activities into the 1990's. We anticipate that expansion of counseling and testing activities, and the addition of new, HIV-related tests to the repertoire of tests offered by public health laboratories, will require ongoing efforts to train laboratorians and to assure the quality of laboratory test results which support HIV prevention programs.

HUMAN IMMUNODEFICIENCY VIRUS EVALUATION

Mr. Stokes: What level of evaluation is required in all federally funded HIV prevention and education grants -- whether provided directly to a contractor or indirectly through a State or local Government?

Dr. Roper: CDC requires that all HIV/AIDS prevention funding recipients have an approved plan for evaluation of all activities. These evaluation plans are based on specific, measurable, time-phased, objectives related to the impact upon the target group, the measurement of specific expected outcomes, and the evaluation of those processes necessary to achieve the approved objectives. The recipients are required to submit periodic progress reports to CDC in a narrative format. Progress is also noted and technical assistance provided during site visits by CDC project officers, through formal program reviews by CDC staff, and through other communications.

The CDC provides State and local education agencies with fiscal and technical assistance to assist these agencies in developing, implementing, and evaluating HIV prevention education programs for school-aged youth. Through cooperative agreements, each agency is encouraged to assess program activities in areas such as teacher and administrator training, classroom instruction, parent and community education, program policies, and programs for out-of-school youth. In addition, each agency is encouraged to measure changes in students' HIV-related knowledge, beliefs, and behaviors through the use of school-based surveys. Agencies are required to submit periodic progress reports to CDC. Progress is also noted and technical assistance provided during site visits by project officers.

Mr. Stokes: Has CDC considered a requirement that all education and prevention grants include a set-aside for evaluation, with CDC providing technical assistance to those inexperienced in evaluation?

Dr. Roper: Although CDC has not considered requiring a specific set aside, it is estimated that approximately 10 percent of CDC's HIV prevention funds are allocated to evaluation activities.

HIV-INTRAVENOUS DRUG USERS-COLLABORATIVE ROLES

Mr. Stokes: There seems to be overlapping jurisdiction between the CDC and NIDA regarding working drug users in preventing AIDS which is the lead agency and how are efforts being coordinated?

Dr. Roper: CDC is the lead agency in the Public Health Service for HIV prevention and, as such, has a role in preventing HIV among intravenous drug users. CDC collaborates with other PHS agencies, such as ADAMHA and HRSA, to ensure that efforts are coordinated and that duplication of efforts is avoided. CDC supports HIV counseling, testing, referral, and partner notification programs in drug treatment programs through the HIV prevention and surveillance cooperative agreements with State and local health departments. To ensure coordination at the local level, CDC encourages cooperative agreement recipients to collaborate with drug abuse agencies in developing joint plans to address HIV prevention among IVDUs. In FY 1989, over $20 million was spent for counseling, testing, and partner notification programs in drug treatment centers; in FY 1990, approximately $25.2 million has been budgeted.

CDC supports HIV prevention street outreach programs for IVDUs and their sexual partners that: 1) promote cessation of drug use, 2) refer drug users for treatment and other appropriate medical services; 3) counsel IVDUs to cease or reduce needle-sharing practices; 4) promote the use of bleach; and 5) provide other risk-reduction messages including the adoption of safer sexual behavior practices. These programs are supported though cooperative agreements with State and local health departments and by financial and technical assistance provided directly to community-based organizations or indirectly through the U.S. Conference of Mayors. CDC has provided its support for HIV prevention street outreach programs primarily in the most heavily affected States and cities not funded by NIDA's AIDS Outreach Demonstration Research Projects.

CDC and NIDA jointly plan HIV prevention projects related to drug users and share information and research findings. CDC and NIDA staff and researchers are collaborating to report results in peer review journals of the effectiveness and potential benefits of street outreach programs in HIV prevention.

NIDA staff have participated with CDC in reviewing applications submitted by competing CBOs for direct CDC funding.

AIDS IN THE HEMOPHILIA COMMUNITY

Mr. Early: Please summarize the steps CDC has taken to utilize the national hemophilia treatment network in addressing AIDS in the hemophilia community pediatric AIDS.

Dr. Roper: Hemophilia treatment centers have been providing HIV counseling and testing to their clients on an ongoing basis since 1987. The HTCs are staffed with physicians, nurses, and social workers who integrate HIV risk-reduction messages into the comprehensive care of their patients. Partner notification and counseling of partners is part of their responsibility and is conducted either on site or in coordination with local health departments.

Recently, there has been a special emphasis on outreach to underserved clients since the HTCs see only approximately 60 to 65 percent of the nation's hemophilia patients. The Office of Maternal and Child Health and the National Hemophilia Foundation have been working together to develop this programmatic area. Ten local NHF chapters have been awarded grants to implement outreach programs for hemophilia patients from minority groups.

In 1988, a national agenda was established which delineated specific goals and objectives for the hemophilia risk-reduction program. In 1989, a workshop and a procedures manual were provided for the HTCs to assist them in the development of focused management and evaluation plans. There has been ongoing communication among the leadership of CDC, OMCH, and NHF to further develop a coordinated national agenda. Areas of emphasis in 1989 have included education for risk-reduction, information dissemination, technical assistance, outreach, data collection, and evaluation.

In fiscal year 1990, CDC has established an ad hoc committee on education for HIV risk reduction in the hemophilia community to address the premise that the heterosexual and perinatal transmission of HIV in the hemophilia community can be halted or reduced by developing and enacting specific educational strategies. CDC and HRSA have convened an ad hoc data and evaluation committee to address systematic evaluation issues facing the hemophilia community. CDC and HRSA have distributed a minimum data set along with data definitions for use by all hemophilia treatment centers throughout the country to assess progress in meeting the national HIV risk reduction goal. CDC has developed a program announcement to establish up to ten adult and up to fifteen adolescent sentinel evaluation projects for the prevention of sexual and perinatal transmission of HIV within the hemophilia community. CDC and HRSA will jointly conduct "case studies" (site reviews) in accordance with the recommendations of the National Academy of Science publication Evaluation of AIDS Prevention Programs.

PEDIATRIC AIDS

Mr. Early: What are CDC's plans for FY 90 and FY 91 in the area of pediatric AIDS?

Dr. Roper: In fiscal year 1990, CDC's efforts in the prevention of HIV infection among women and infants include assessing HIV prevalence and risk factors among women of reproductive age undergoing routine HIV testing, examining health care costs associated with using family planning services to prevent HIV transmission, and assisting the Office of Population Affairs in providing training in HIV-related prevention activities to health care workers at family planning and women's health clinics. In addition, CDC funds perinatal HIV prevention projects which focus on women of childbearing age who are infected or at high-risk of infection.

CDC coordinates several studies of perinatal transmission of HIV from mother to child, including the rate, timing and risk factors for transmission and factors influencing disease progression. Several new tests for diagnosis of HIV infection in infancy are being evaluated and compared in these studies.

In addition, CDC continues to support national pediatric AIDS case surveillance, and supports and coordinates the national survey of HIV in childbearing, conducted through blinded testing of newborn heelstick blood samples.

For fiscal year 1991, CDC has requested an increase of $16.5 million in order to continue these ongoing efforts, and also to initiate a number of epidemiologic studies in the area of HIV prevention among women and infants, including assessing: the determinants of contraceptive use; the impact of HIV infection on pregnancy; the biologic determinants of HIV transmission from mothers to infants; and the impact of HIV infection on infant, childhood, and maternal mortality. The increase would also enable CDC to develop a uniform system for reporting all children with HIV infection, and to begin targeted intervention in selected high incidence cities.

Mr. Early: How much did CDC originally request for pediatric AIDS activities?

Dr. Roper: CDC initially requested an additional $120.6 million for preventing HIV in women and infants.

Mr. Early: What additional activities and efforts would these additional funds enable CDC to undertake?

Dr. Roper: Increased funds would have been utilized to expand HIV counseling, testing and prevention services in existing sites and establish those services in additional sites; expand seroprevalence data collection obtained from the ongoing Family of Surveys; further expand surveillance of HIV risk factors associated with pregnancy and maternal mortality; and expand the Pregnancy Risk Assessment Monitoring System to additional areas to collect information on the level of women's awareness of HIV risk status during pregnancy, and contraceptive practice following delivery.

Mr. Early: What are CDC's most recent estimates and projections for the incidence of pediatric AIDS?

Dr. Roper: CDC is currently developing projections based upon AIDS case data and HIV seroprevalence data.

Mr. Early: What about the rate of increase?

Dr. Roper: Over 80 percent of AIDS cases in children are related to HIV transmission from mother to infant (perinatally acquired infections). Perinatally acquired AIDS cases diagnosed in 1989 (adjusted for reporting delay) represent a 38 percent increase over cases diagnosed in 1988, a greater increase than for any other transmission category. In contrast, pediatric AIDS cases associated with transfusions declined 42 percent in 1989 compared to 1988, reflecting the fact that effective screening of the blood supply and donor deferral have nearly eliminated new transfusion-associated infections.

Data from the national survey of HIV in childbearing women, conducted through blinded testing of newborn heelstick blood samples collected for routine metabolic testing, show that 5500-6000 HIV infected women delivered liveborn infants in 1989 (an HIV seroprevalence rate of 1.5 per 1000 women). Of these infants, 20-40 percent are infected with HIV and will likely develop AIDS.

Mr. Early: Do these figures include children who are HIV positive, but not symptomatic?

Dr. Roper: Reported AIDS cases are, by definition, symptomatic.

Mr. Early: Is CDC planning to revise its definition of or reporting requirements for pediatric AIDS in order to provide a more accurate picture of the situation?

Dr. Roper: CDC is working to ~~develop~~ a single and uniform system for reporting pediatric AIDS cases and HIV infection cases in accordance with State and/or local law or regulation. CDC currently coordinates a pilot pediatric HIV surveillance project in 6 geographic regions. CDC is also evaluating the current pediatric HIV classification system and AIDS case definition.

Mr. Early: What new information have we learned about pediatric AIDS within the past year?

Dr. Roper: HIV transmission from an infected mother to her child occurs in 20-40 percent of pregnancies. Advanced disease in the mother increases the risk of transmission. Presence of maternal antibody to a part of the HIV envelope glycoprotein (gp120) has been associated with a decreased risk of transmission to the infant. HIV transmission through breastfeeding is less common than transmission during pregnancy, but can occur, particularly in women who have recently been infected with HIV. New virologic and immunologic tests, such as the polymerase chain reaction or tests measuring HIV-antibody producing cells, are promising for early detection of infection in newborns.

Special surveillance studies have shown that for each child with AIDS, there are 1-2 children with asymptomatic or milder HIV infection under care for their disease.

ADOLESCENT AIDS

Mr. Early: What can you tell us about HIV and AIDS in Adolescents?

Dr. Roper: As of December 31, 1989, 486 AIDS cases among persons 13-19 years of age have been reported in the United States. Of these cases, 21 percent were females; 53 percent were black or

Hispanic; and 29 percent were homosexual/bisexual males; 11 percent were heterosexual intravenous drug users; and 12 percent were heterosexual contacts of persons with HIV infection or at risk for HIV infection. Among school- and college- aged youth, the rate of HIV infection and the number of AIDS cases are a significant concern for CDC. Over 20 percent of all AIDS cases are among 20-29 year olds; given the long latency period of up to ten years between HIV infection and AIDS diagnosis, a proportion of the persons in this age group were infected as adolescents or very young adults. In addition, in 1987, AIDS was the ninth leading cause of death among 15-24 year olds. A study of Job Corps applicants between the ages of 16 and 21 revealed HIV prevalence ranges from 0.14 percent among 17 year olds to 0.90 percent among 21 year olds.

Youth are also engaging in risk behaviors that can lead to HIV infection. In 1989, a school-based survey of a national probability sample of high school students showed that 2.7 percent had used IV drugs, that 58.5 percent had engaged in sexual intercourse, and that 21.3 percent had had four or more sexual partners. In addition, the long-term spread of HIV infection and the mobility of youth to urban centers with a high incidence of HIV means that every child in America is potentially at risk for HIV infection and therefore needs to participate in HIV prevention/education programs.

Mr. Early: Do we know the extent of HIV infection in this group?

Dr. Roper: Results from 285 clinics indicate that HIV seroprevalence in 15-19 year olds ranges from 0%-4.6% (median 0.5%) in STD and 0%-1.7% (median 0%) in women's health surveys. HIV seroprevalence among 20-24 year olds ranges from 0%-30.4% (median 1.8%) in STD, 0%-35.3% (median 0%) in drug treatment, and 0%-3.1% (median 0%)in women's health clinics. Seroprevalence rates vary by sex in STD clinics, with a median male rate of 1.3% and a median female rate of 0.6%. Highest rates in STD patients, regardless of age, are in men who have sex with other men. Rates of HIV infection in STD and women's health clinics are highest in the northeast and south.

CDC's HIV Survey of Childbearing Women in 46 States and territories includes adolescent childbearing women. Data are still preliminary on HIV prevalence in this age group; however, adolescents having babies are probably not typical of all adolescent women in terms of HIV risk.

HIV seroprevalence among adolescents is also measured in the Sentinel Hospital System for HIV Infection. Findings from sentinel hospitals indicate that rates of HIV infection as high as 1.0% may be encountered among 15 to 16 year olds in some poor inner city areas, and that these rates increase rapidly throughout late adolescence. Much lower seroprevalence rates are encountered among adolescents at most sentinel hospitals, but cases of HIV infection are detectable by 15 to 16 years of age even in some low seroprevalence hospitals.

CDC also collaborates with the Department of Labor in analyzing the results of the routine serologic screening of entrants to the Job Corps. From the results in Job Corps entrants 16-21 years old from October 1987 through November 1989, among the 131,119 specimens tested, 524 (0.4%) were infected with HIV. Rates per 1,000 tested are as high as 6.1 for black males to 0.7 for white females. Trends over time among Job Corps entrants show a stable HIV seroprevalence, but these data indicate that many adolescents continue to become infected each year. The data reveal rapid acquisition of HIV infection during the middle and late teen-age years, most rapidly among minority youth, and show the critical importance of HIV prevention activities in this age group.

It is clear that adolescents and young adults are continuing to become infected with HIV, with differences being observed by clinic type, sex, age group, race/ ethnicity, and geographic region.

Mr. Early: Do you think CDC's programs are adequately addressing this cohort?

Dr. Roper: Yes. Since 1987, CDC has conducted a national initiative designed to increase the number of schools and youth-serving agencies that provide HIV education programs and that integrate HIV education into comprehensive health education programs. This program has the potential to reach the more than 45 million young people currently enrolled in elementary and secondary schools across the country and the more than 12 million students enrolled in colleges and universities. As part of this effort, CDC provides fiscal and technical assistance to 21 national education and health organizations, 55 State and territorial, and 16 local departments of education to develop and implement HIV prevention education programs. CDC is also planning to help develop programs specifically for out-of-school youth by providing funds to local health departments in select high incidence cities to coordinate, intensify, and increase the efforts of organizations that provide HIV education for these youth.

HEPATITIS B

Mr. Early: The FY 90 bill included approximately $10.5 million to initiate a program to screen pregnant women for hepatitis B and immunize infants of HBV carrier mothers. How much are you allocating for this purpose in FY 90 and what are your plans for implementing this initiative?

Dr. Roper: We have allocated $8 million for the screening of pregnant women for hepatitis B and the treatment of infants born to HBV carrier mothers. Of this approximately $1.5 million will go for the purchase of hepatitis B vaccine and hepatitis B immune globulin. At this point we have negotiated a contract for the purchase of vaccine at $15 per dose for treatment of infants born to HBV carrier mothers and we are currently negotiating a contract for purchase of hepatitis B immune globulin. It now appears that the cost of treating an infant born to a HBV carrier mother, in the public sector, will be approximately $60 compared to approximately $150 before we had the funds to negotiate these contracts.

$6.5 million will go directly to state immunization programs for the screening of pregnant women. Currently, states are submitting to CDC their plans for supplementing existing screening and prevention programs or implementing programs where none exist. Awards to States should be made by early summer. Funding levels will be determined by the strengths of the proposals, as well as by the expected number of HBV infected pregnant women in the state.

The remaining $2.5 million is being used to support this prevention effort. They are being used to fund the personnel required to implement and evaluate these prevention efforts, to develop appropriate health education materials, to evaluate the economic consequences of the acute and chronic disease associated with hepatitis B infection and to evaluate long-range approaches to the prevention of hepatitis B in the U.S.

Mr. Early: Did CDC receive sufficient FTEs to implement this initiative?

Dr. Roper: We received the 10 FTE's we requested in this budget initiative.

Mr. Early: Is elimination of hepatitis B transmission as a significant health problem a goal of the health objectives for the year 2000?

Dr. Roper: Our year 2000 objective for hepatitis B is to reduce the incidence of disease to 40 per 110,000 people. As you are aware, our 1990 target was to reduce the incidence of disease to 20 per 100,000 people. However, the current rate is approximately 55 per 100,000 people. The year 2000 objective would bring the rate of disease back to the level that existed in 1979.

The Year 2000 Objectives contains the objective to increase hepatitis B immunization levels among high-risk populations as follows:

Infants of surface antigen-positive mothers	90%
Health Care Workers	90%
IV Drug users	25%
Homosexual men	50%

Mr. Early: What are your program plans for FY 91 and how much is included in your Budget Request?

Dr. Roper: In 1991, we have requested funds to continue the perinatal program at the 1990 funding level of $10.5 million. At this level, over 1 million pregnant women will be screened in the public sector and an estimated 8,700 infants born to HBV-positive mothers (carriers) can be immunized.

Mr. Early: What was CDC's original request for this initiative?

Dr. Roper: CDC's original request to the Public Health Service for this program was $18,800,000 for FY 1991.

Mr. Early: How does your original request differ from the budget request before us?

Dr. Roper: CDC's original request provided funding for screening of all of the estimated 1.8 million pregnant women who receive prenatal care in the public sector, and would also have provided testing and vaccination of susceptibles for the estimated 34,000 household contacts of infected women found through prenatal screenings. The current request takes into account other funding priorities and will enable states and localities to provide screening and identification of 60% of the target population.

Mr. Early: Should hepatitis B vaccine be part of routine childhood immunization?

Dr. Roper: The CDC and other public health groups are currently considering the possible need for childhood immunization with hepatitis B vaccine. A factor strongly favoring the development of such programs is the demonstrated ability of current programs to successfully vaccinate children against diseases. However, because most hepatitis B infection occurs among adults (and only a small proportion among children less than 15 years of age), childhood immunization programs will require many years to achieve a significant impact on disease.

Mr. Early: Would this be difficult or costly?

Dr. Roper: Integration of hepatitis B vaccine into routine childhood immunization schedules would not be difficult. It would require the education of parents and healthcare providers. In the U.S. we have shown that this is feasible in places like Alaska and the Pacific Island jurisdictions such as American Samoa, Palau, Saipan and Guam. In these areas hepatitis B vaccine has been integrated into routine immunization schedules because children primarily become infected in these populations. Immunization of adolescents may be more difficult and would only be seen as "catch-up" immunization until children immunized during infancy become teenagers.

Routine immunization of children served in the public sector by the Federal, State and local governments would cost approximately $42.8 million a year for purchase of HB vaccine at the current contract price. An additional $10 million would be required for program operations. These levels of funds are not being requested though, within our priorities for the 1991 budget. Achieving high levels of coverage would probably require school immunization laws such as those now in effect for most childhood vaccine-preventable diseases.

Mr. Early: What benefits would this produce?

Dr. Roper: Universal immunization of infants alone would reduce the number of hepatitis B infections by 20% within 10 years and by 50% within 25 years. The reason for the slow rate of decrease is that most infections in this country occur among adults. If we began immunization of infants and also did "catch-up" immunization of teenagers, then we would expect a 35% reduction in cases within 10 years and an 85% reduction in 25 years.

The costs of acute hepatitis B as well as liver disease from chronic infection are very high. Data obtained in 1981 indicated that the direct medical costs for acute and chronic disease were approximately $180 million annually. The indirect or work-loss cost were almost equal to the direct medical costs. Hepatitis B immunization will not eliminate this economic burden quickly since there are almost 1 million Americans who are chronically infected with this virus and at least 25% will die from chronic liver disease. However, immunization is the only strategy that will prevent these consequences over the long-term.

Mr. Early: How many individuals (mothers and infants) covered by public sector funding could benefit from this program?

Dr. Roper: Approximately 1.8 million women and their infants would be covered annually, if all women and infants estimated to be receiving health care through the public sector received hepatitis B screenings or immunizations..

Mr. Early: I understand that drug abusers are among the high risk groups for HBV infection. Does CDC plan any effort toward drug abusing women of child bearing age?

Dr. Roper: CDC currently recommends that all pregnant women, including drug abusers, be screened during pregnancy for active hepatitis B infection, and that infants born to HBV-carrier mothers begin the hepatitis B vaccine series and be given hepatitis B immune globulin at the time of birth. These procedures will protect infants born to drug abusing women from perinatally acquiring HBV infection. In addition, CDC recommends that all drug abusers, including pregnant women, be screened for hepatitis B infection, and if susceptible, be given the hepatitis B vaccine series. In a study done to try to immunize drug users in a variety of non-threatening settings, we found that most of those who came in for vaccination were already infected with hepatitis B. This was not done primarily among women of childbearing age, so we don't know if there would be a better response. Our impression is that it is very difficult to immunize this high risk group before they become infected. We think it would be more effective to target immunization of adolescents in general, especially in high risk areas such as in large urban areas.

Mr. Early: I understand that some data show child-to-child transmission, inside and between households, may be an important factor in the spread of HBV infection. Would you comment on this?

Dr. Roper: Child-to-child transmission of HBV within households is well recognized, and HBV vaccination of household contacts has been recommended and is part of current HBV control programs. Child-to-child transmission between households has not previously been considered common in the United States, but recent studies have shown that among refugee groups, particularly those from Southeast Asia, such transmission may occur frequently. This may be due to crowding of multiple families within households and other sociodemographic factors. As a result of this new information, it is now recommended that all infants born in families which have immigrated from HBV-endemic areas should receive hepatitis B vaccine, and that vaccine should also be considered for all children under 7 years of age in these families.

Mr. Early: What can you tell us about the incidence and rate of increase of Hepatitis B?

Dr. Roper: The annual incidence rate of hepatitis B increased steadily from 1979 through 1985, reaching in 1985 an estimated incidence of 69 infections per 100,000 population, about 60 percent higher than in 1979. Since then, the estimated incidence has decreased by about 15 percent, to 57 infections per 100,000 in 1989. The cause of the small decline has primarily been due to a lower rate of hepatitis B among homosexual men due to changes in their sexual practices because of AIDS. Hepatitis B vaccine, which was introduced into the country in 1982, has only been given to healthcare workers. In this risk group there has been an estimated 30% decline in the number of cases over the past several years. However, in the other risk groups there have been increases in hepatitis B.

BREAST AND CERVICAL CANCER

Mr. Early: The FY 90 bill also included approximately $5 million for a breast and cervical cancer control initiative. What is your timetable for implementing this project and how will you use these funds?

Dr. Roper: CDC will direct approximately one-third of the $5 million total to directly support State breast and cervical cancer mortality prevention programs. Assistance will be provided to 3 to 4 States in the initiation of comprehensive screening programs for the early detection and follow-up of breast and cervical cancer. Support will be provided to an additional State to augment existing screening and follow-up activities, resulting in a comprehensive breast and cervical cancer program in that State. State support will include the assignment of CDC field staff to assist in program design and implementation.

The remaining two-thirds of the $5 million will be directed toward the establishment of key core elements to serve as a base for a strong national program to prevent breast and cervical cancer. These elements are:

- Information/education campaigns to educate women on the value of regular screening for breast and cervical cancer
- Education campaigns for health care professionals to promote high-quality screening and effective follow-up
- The development of standards, training, and tracking systems to ensure screening tests are of the highest possible quality, and

- The augmentation of breast and cervical cancer surveillance systems to better target prevention resources and evaluate program effectiveness.

Together, these core elements will establish the basis of a framework for breast and cervical cancer prevention from which all States will benefit.

CDC will release the request for State assistance proposals shortly. The award of funds to approved States is expected by September 1990.

Mr. Early: How many States will be assisted in FY 90?

Dr. Roper: With the $4,926,000 appropriated in FY 90, CDC will use approximately one-third of this funding to directly support State programs designed to prevent deaths from breast and cervical cancer. Assistance will be provided to approximately 3-4 States to initiate comprehensive screening programs for the early detection and follow-up of breast and cervical cancer. Support will be provided to an additional State to augment existing screening and follow-up activities, resulting in a comprehensive breast and cervical cancer mortality prevention program in that State. State support will include the assignment of CDC field staff to assist in program design and implementation.

Remaining FY 90 funding will be used to establish a framework of core components for an effective screening and follow-up program, including quality assurance of the screening tests, public and provider education on the value of and recommended guidelines for screening, and surveillance and program monitoring functions to evaluate program effectiveness. These will provide basic program components for use by all interested States.

In addition to the States being assisted with the funds appropriated in FY 90, CDC is also supporting breast and cervical cancer mortality prevention projects in nine States and in one Indian Health Service area. These projects are directed at the development and evaluation of intervention efforts, quality assurance of the screening tests, epidemiologic analysis, and improved surveillance.

Mr. Early: Part of this initiative includes a quality assurance program. How do you plan to ensure that screening tests are of the highest possible quality and reliability?

Dr. Roper: Properly carried out and accurately interpreted, mammography and the Pap smear test are very effective in distinguishing between women who should be recalled for more definitive tests, and those with normal test results who should return for regular screening at the appropriate interval.

In order to maximize the value of the screening tests themselves and, indeed, the screening and follow-up process, it is essential that the tests as administered and as interpreted be of the highest possible quality. CDC is working with professional organizations and other Federal agencies to address this issue. For example, CDC has assisted the Health Care Financing Administration to establish cervical cytology laboratory standards and is working with the Food and Drug Administration, the American College of Radiology, and others on issues related to quality assurance for mammography. We will continue to work with these organizations and others in a coordinated effort to ensure the quality of the screening tests for breast and cervical cancer.

Mr. Early: How much is included in your FY 91 Budget request for this purpose?

Dr. Roper: In FY 1991 $4,926,000 is requested to continue the activities initiated in FY 90.

Mr. Early: What are your program plans for FY 91?

Dr. Roper: In 1991, CDC proposes to continue activities that began with FY 1990 Breast and Cervical Cancer Initiative funding. National activities in the areas of public education, provider education, surveillance, and quality assurance for cervical cytology and mammography will continue. Technical assistance to State health departments to enhance existing breast and cervical cancer control programs and planning for effective breast and cervical cancer control programs will continue at the same level as in FY 1990.

Mr. Early: How many States currently have a comprehensive breast and cervical cancer screening program?

Dr. Roper: The term comprehensive would be defined differently by different individuals, thus this is a difficult question to answer. However, since there are so many components of a truly comprehensive breast and cervical cancer screening program it is unlikely that any State currently has all the necessary pieces in place at this time. It is possible that some States may have screening programs in place for certain populations or for specific regions. It should be noted, though, that in the 1989 Omnibus Budget Reconciliation Act of 1989, the Congress provided for Medicare reimbursements for cervical cancer pap smears for female beneficiaries throughout the country.

Mr. Early: What was your original request for this program and how does it differ from the request before us?

Dr. Roper: CDC's original FY 1991 request to the Public Health Service for breast and cervical cancer activities was $25,000,000. The President's budget request before you includes $4,926,000 to provide the same level of effort in FY 1991 as provided in FY 1990.

Mr. Early: What additional efforts and activities would these additional funds have enabled CDC to undertake?

Dr. Roper: A budget of $25 million for FY 1991 would have allowed CDC to increase the number of States receiving funding to implement comprehensive breast and cervical cancer programs.

In addition, CDC would have further expanded its efforts in public and professional education on the value of and recommended guidelines for screening; designing systems to ensure the highest possible accuracy of the screening test, both as administered and as interpreted, and; cooperative interactions with professional and voluntary organizations as well as other Federal agencies in assurance in screening procedures. However, CDC is not requesting funding for this program at this higher dollar level within its priorities under the 1991 President's Budget.

SEXUALLY TRANSMITTED DISEASES

Mr. Early: The FY 1990 bill included a $2.5 million increase for the STD program. How will CDC use this increase and how will these additional funds be allocated?

Dr. Roper: CDC will use all of this increase to target syphilis prevention and control programs to the 35 highest syphilis morbidity counties based on FY 1988 morbidity.

Mr. Early: CDC has published data showing dramatic increases in the rates of STDs over the past several years. For example, an estimated 12 million new infections could occur each year. Syphilis has increased over 100 percent in some U.S. cities and rates of chlamydia have increased as well, affecting an estimated 4 million women each year. What new programs are you planning or proposing to address these mounting problems? Expansions?

Dr. Roper: For the increases in infectious syphilis, the program announcement for STD grants for FY 1990 specifically addresses the importance of targeting prevention and control activities for syphilis to the 35 highest morbidity counties in the Nation. In addition, special demonstration funds have been awarded under Section 318(b) of the Public Health Service Act to the City of Philadelphia to provide and evaluate community-based outreach activities for early syphilis in the highest morbidity districts within that city. These two activities, one program-based and the other evaluation-based, should address syphilis increases since almost two-thirds of the syphilis reported occurs in these 35 highest morbidity areas. To address the issue of resistant gonococcal infection, the revised 1989 Treatment Guidelines recommend a significant change in the therapy for the treatment of uncomplicated gonococcal infection -- from penicillin, which had been the treatment of choice since the mid 1940s, to ceftriaxone. The recommended dosages appear highly effective against gonococcal infection and should adequately address the problem of increases in resistant gonococcal infection.

The substantial progress that was made in 1989 in the development of prevention and control programs for chlamydia will be continued. CDC will emphasize the importance of maintaining activities during FY 1991.

Specific behavioral interventions to reduce unsafe sexual behavior have had mixed success. To date, the only group which has markedly reduced its unsafe sexual behaviors has been white men who have sex with other men. However, in other groups, STD trends imply that safer sexual behaviors have not been adopted. The increasing trends in STD among low-income, urban, minority, heterosexual populations indicate that State and local public health officials need to better target their STD/HIV prevention messages to these populations at highest risk in an effort to reduce unsafe behaviors. This will be a major area of emphasis for CDC during FY 1991.

Mr. Early: Is the incidence of chlamydia increasing or decreasing?

Dr. Roper: The estimated annual incidence of chlamydial infection (4 million cases) appears to be remaining stable. Visits to private physicians offices by males with non-specific urethritis have remained at approximately 700,000 since 1982. The more important issue is the number of preventable complications that occur each year because of chlamydial infection. For example, ectopic pregnancy, up to half of which may be related to previous chlamydial infection, has been steadily increasing over the past two decades.

CHLAMYDIA

Mr. Early: How much is being allocated for prevention and control of chlamydia in FYs 1990 and 1991?

Dr. Roper: In both FY 1990 and 1991, $18,656,000 in grants will be devoted to chlamydia prevention and control activities. For FY 1989, $1,830,100 and in FY 1991, $1,849,700 will be utilized in direct operation funds.

Mr. Early: Will the FY 1991 request enable CDC to expand its chlamydia prevention and control activities, and in what way?

Dr. Roper: While the financial support for chlamydia prevention and control activities will not be expanded from FY 1990 to 1991, CDC will continue to emphasize the importance of States expanding their chlamydia prevention and control activities. Given the history of competing STD priorities during the development of the current chlamydia prevention and control program, it is likely that some expansion will continue through FY 1991.

Mr. Early: The justification indicates that 42 states have at least one city or county STD program offering comprehensive chlamydia surveillance, diagnostic testing and treatment services. As I recall, these figures haven't changed in the past few years. Is that correct? Given the seriousness of this problem, do these efforts at the State and local level need to be expanded?

Dr. Roper: Your recollection is correct in that since fiscal 1987, the number of states that have at least one comprehensive chlamydia surveillance, diagnostic and testing and treatment site has not expanded. However, within those 42 States, chlamydia prevention and control activities have increased. For example, in fiscal 1989, over 60,000 patients with chlamydial infection were interviewed regarding their sex partners compared to 9,900 in FY 1988. Over 1.4 million women and 410,000 men were screened for chlamydia in fiscal 1989 compared to 607,000 women and 226,000 men in fiscal 1988. Of the patients interviewed in 1988, 18,600 sex partners were referred for examination compared to nearly 50,000 in fiscal year 1989. As a result of 1989 activities, over 80,000 potential cases of genital chlamydia infection were prevented compared to less than 28,000 in fiscal 1988. Further, three additional States enacted legislation requiring the reporting of chlamydia during FY 1989.

SYPHILIS CASES

Mr. Early: The number of syphilis cases is at its highest level since 1948. The justification indicates that between 1988 and 1989 the infant congenital syphilis cases increased 37 percent and that this figure is an underestimate since only overtly symptomatic infants have been reported. What steps does CDC plan to take in FY 1990 and 1991 to address this problem? How much is included in your budget request for these activities? Are STD's a common or severe problem among adolescents/teenagers?

Dr. Roper: To effectively address the problem of congenital syphilis, two areas must be considered. We must first address the increases of infectious syphilis in the adult population. Then we must improve access to prenatal care for pregnant women to ensure identification and treatment of infectious syphilis early in the pregnancy thereby preventing transplacental infection of the fetus. CDC has specifically addressed the importance of targeting prevention and control activities for infectious syphilis to the 35 highest morbidity areas of the Nation in its FY 1990 and 1991 program announcement for STD grants. Expanding syphilis control activities and services in these areas will address almost two-thirds of the syphilis reported throughout the Nation. CDC works directly with State and local health departments to encourage education programs which emphasize early and repeated testing for STD, especially syphilis, among pregnant women. In areas where access to prenatal care is not readily available, many STD clinics have established testing programs where pregnant patients can be tested before their first prenatal visit to determine whether they have syphilis. The follow-up of prenatal-positive serologic tests for syphilis is a high priority for each of the Nation's STD control programs.

The budget request includes $26,500,000 in grant funds and $1,849,700 in direct operations funds for prevention and control activities for infectious syphilis. CDC does not break out a specific budget for congenital syphilis activities since all activities directed to reduction of infectious syphilis among adults will result in an eventual reduction in congenital disease.

STDs AMONG ADOLESCENTS/TEENAGERS

Mr. Early: Are STDs a common or severe problem among adolescents/teenagers?

Dr. Roper: CDC's estimate is that approximately 2.5 million teenagers are infected with an STD annually.

Mr. Early: Are special efforts being made to address youths?

Dr. Roper: CDC's estimate is that approximately 2.5 million teenagers are infected with an STD annually. For this reason, disease prevention and control efforts are targeted to youth, especially youth in the inner-cities. This education includes specific school-based curricula. Numerous curricula have been produced by State and local health departments, especially in California, Florida, Georgia, Louisiana, Minnesota and North Carolina. The greatest impetus to school-based STD education has been the threat of HIV infection. School districts which have been reluctant to address STD education have begun to include educational programs on HIV and AIDS, other STD and drug abuse. This has allowed us to get a foot in the door to develop creative programs emphasizing skills to resist peer pressures toward unsafe behaviors.

OTHER STDs

Mr. Early: What can you tell us about current trends in other STDs such as PID and genital ulcers?

Dr. Roper: The morbidity for the genital ulcer diseases such as syphilis, herpes, and chancroid is as follows: Infectious syphilis has increased each year since 1986, with FY 1989 representing the highest number of reported cases since 1948. The estimated yearly incidence for genital herpes simplex virus is 200,000 to 500,000 cases with one in six Americans having been infected. The HSV prevalence estimate was 30 million infections in 1987. Chancroid infections are relatively rare in the United States, but accounted for over 5,200 cases in FY 1989. Although this represents a decrease of 4.9 percent from the number reported in FY 1988, this number of cases is higher than that reported in any year since 1949. Approximately 750,000 cases of pelvic inflammatory disease, PID occur annually. PID is the most severe complication of lower genital tract infections in women and an important cause of infertility and ectopic pregnancy. Data on PID are difficult to interpret because most patients with PID may not have any symptoms until they develop sequelae later in life.

STD FUNDING

Mr. Early: Of the $10,754 million requested for STD program operations, how much is CDC's ih-house STD program? (Excluding Tuskegee)

Dr. Roper: The in-house STD programs receive approximately $8.8 million.

Mr. Early: What is the current services requirement for the in-house program in FY 1991?

Dr. Roper: The current services requirement for FY 1991 is approximately $496,000 above the President's request.

Mr. Early: How much did CDC originally request for the STD program for state grants? For program operations (including FTEs)?

Dr. Roper: The original request to the Public Health Service for the STD program for state grants was $168,422,000 and for program operations was $17,100,000 and 187 FTEs.

Mr. Early: What activities and initiatives would these additional funds enable CDC to undertake?

Dr. Roper: The original request would have expanded support for STD prevention and control efforts in research, surveillance, disease intervention/program operations at the State and local level, and training of clinicians and health care workers. The President's Budget accounts for other funding priorities, and requests $70.7 million in grants to States for STD prevention and control activities in 1991.

STDs IN MINORITY POPULATIONS

Mr. Early: What is the impact of STDs on the health of minority populations? What is CDC doing to address this?

Dr. Roper: Clearly the impact of STD on minority populations is substantial. Almost two-thirds of the STDs for which prevention and management services are effective occur in the Nation's 35 largest counties, and minorities constitute a substantial proportion of these, urban inner-city populations. For the past two years, most of the increase in primary and secondary syphilis has occurred in low income, inner-city heterosexual minority populations. Syphilis rates are 31 times higher among blacks than among whites, and 11 times higher among hispanics than whites. For gonorrhea, the rate per 100,000 populations by racial/ethnic categories were 30 times higher among blacks than whites, and almost three times higher among hispanics than whites. A major CDC objective, therefore, is to develop effective and culturally-sensitive programs to educate members of minority populations, and to gain broad support and acceptance for STD prevention program efforts throughout the United States and its territories. STD project grants are awarded to State and local health departments and to appropriate public and non-profit entities which emphasize the reduction of morbidity and mortality in minority, inner-city populations.

GONOCOCCAL RESISTANT STRAINS

Mr. Early: I understand that the number and percentage of gonococcal strains resistant to standard therapies has increased substantially. What can you tell us about this problem and what is CDC doing to address it?

Dr. Roper: The percentage of gonococcal strains that are resistant to traditional therapies has increased. In 1989, 25.2 percent of strains were resistant to penicillin and/or tetracycline according to CDC surveillance data. To meet this problem, the CDC has changed its recommended therapy to ceftriaxone, an antibiotic to which all gonococci are currently susceptible, and has strengthened surveillance of organism susceptibilities.

DIAGNOSIS AND TREATMENT OF STDs

Mr. Early: How would you assess the capability of health care providers in diagnosing and treating currently recognized STD's?

Dr. Roper: Although it is difficult to determine precisely the capability of health care providers in the diagnosis and treatment of STD, we infer from a number of studies that the clinical assessment and management of STD remains a problem area. Past surveys suggest that the majority of STD cases are seen by private physicians, but most of these cases are not reported to the local health departments resulting in probable underestimation of true disease incidence. Underdiagnosis and undertreatment by primary care physicians may also contribute to the spread of these infections.

Data from the National Ambulatory Medical Care Survey indicate that family physicians are the care providers in 37 per cent of all ambulatory care visits, 0.6 percent of which are related to STD, excluding vaginitis. An additional 12 percent of ambulatory visits are handled by internists, 10 percent by pediatricians, and 9 percent by obstetricians/gynecologists. One-tenth of a percent to 1.8 percent of these specialty visits are for STD treatment. Although individual primary care clinicians see only a few individuals with STD in their practices each year, primary care providers as a whole treat the majority of patients with STD in the United States. Family physicians as a group see more total cases of STD in their combined practices than any other medical speciality. Surveys, however, based on chart review and case reporting, suggest that the diagnosis of STD is often missed in these practices.

The diagnosis and treatment of STD may pose special problems to primary care providers because patients with STD may be seen infrequently in practice, and thus the index for suspicion may be low, leading to misdiagnosis or incomplete diagnosis. Many cases of STD are asymptomatic, especially among women, making clinical recognition difficult. Clearly education of primary care physicians about STD risk assessment, diagnosis, clinical management, and surveillance reporting is critical to STD prevention in the United States.

Mr. Early: What needs to be done to improve this situation?

Dr. Roper: A critical need exists to educate physicians early in their medical training about STD management and prevention activities, and to make them aware of public health programs for STD prevention. Continuing medical education for physicians already in practice should address STD epidemiology as well as clinical management, surveillance, and risk assessment. CDC can play a major role in these activities, not only through support of graduate and post-graduate medical education, including support of the STD Prevention and Training Centers, but also through liaison activities with professional medical organizations such as the American Academy of Family Physicians, the American Medical Association, and the American College of Obstetricians and Gynecologists. For example, CDC has taken the lead in developing a curriculum on the clinical management of STD's which will be published by the Academy of Family Physicians and distributed to its members and other primary care physicians.

STD MEDICAL SCHOOL CURRICULA

Mr. Early: To what extent do U.S. medical schools offer clinical curricula on STDs?

Dr. Roper: This has been an area of concern and activity for CDC in the past decade. In 1980, only 10 percent of U.S. medical schools offered any clinical curricula on STD. In response, between 1983-1988, the Division of Sexually Transmitted Diseases, Center for Prevention Services, funded six medical schools to develop or enhance model clinical curricula. Staff of the Division have begun working with the National Board of Medical Examiners to find the extent of students' knowledge by reviewing 1988 and 1989 NBME examinations. These examinations are taken, and must be passed, by senior medical students. In these two years, questions relating to STD constituted 2-3 percent of all questions. We have proposed continued collaboration with the NBME by submitting questions for inclusion on the exam and monitoring results.

HUMAN PAPILLOMA VIRUS - CERVICAL CANCER

Mr. Early: Some strains of the human papilloma virus have been strongly associated with the development of cervical cancer. Bring us up to date on what is now known about this possible association.

Dr. Roper: Over 50 different types of human papillomaviruses have been identified and at least 20 of these may infect the genital region. Almost all visible external genital warts are caused by two types, 6 and 11. Infection of the cervix with HPV is almost always subclinical, where no visible warts are seen and is commonly caused by types 16, 18, 31, 33, and 35. Types 6 and 11 cause a very small proportion of cervical HPV infection. Several studies have shown a moderately strong association between cervical HPV infection and cervical cancer and cancer precursors (called cervical dysplasia or cervical intraepithelial neoplasia). These studies have shown that 40-90 percent of cervical cancer tissue contain HPV types 16 or 18, and that infection is statistically more common in women with cervical cancer and precancer, compared to women without these conditions. These statistical associations persist even after accounting for sexual behavior variables, such as age at first intercourse, number of sexual partners, and other risk factors for cervical cancer like as cigarette smoking, childbearing, nutrition, and nonuse of barrier contraception. Cervical HPV type 16 and 18 infection appears to be fairly common, but most infected women have normal Pap smears. Specifically, HPV types 16 and 18 have been most frequently associated with cervical cancer. No studies have documented that the HPV infection of the cervix precedes the cancer such studies are in progress, and questions remain about the performance of various lab tests used to identify HPV infection. Most experts feel that HPV may be a cofactor in the development of cervical cancer, rather than a causative agent.

Mr. Early: What about the relationship of other STDs to cervical cancer?

Dr. Roper: In some studies, sexually transmitted agents other than human papillomavirus have been associated with cervical cancer; however, HPV is clearly the agent which has been implicated most consistently. Specifically, associations between cervical dysplasia and/or cancer and syphilis, chlamydia infection, trichomoniasis, cytomegalovirus infection and herpes simplex virus infection have been observed. Some experts feel that more than one sexually transmitted agent, perhaps herpes simplex virus and HPV may interact somehow to cause or enhance the development of cervical cancer.

STD FUNDING

Mr. Early: Since the budget includes no increases in funding for all other STDs aside from AIDS, what is the likelihood that these other epidemics will continue to rise?

Dr. Roper: Any program priority decision which emphasizes one particular infection affects the amount of resources which can be dedicated to the others. In 1991, CDC believes it is a higher priority to continue to direct an increasing proportion of its existing STD prevention and control resources to major metropolitan areas, because of the substantial increases of infectious and congenital syphilis in these cities. This, in turn, will affect the amount of Federal STD control funds which can be directed to gonorrhea or chlamydia. The tradeoff is that chlamydia prevention and control programs may be maintained at current levels and that gonorrhea control programs will be reduced if State and local governments also shift their STD resources in line with the Federal priorities and do not maintain these lower priority activities.

It is difficult to assess the impact of the 1991 budget request for STD control grants on disease incidence. While the 1991 budget request maintains the 1990 level of $70.7 million, this is a 29% increase over the 1988 level. In addition, over this same time period, resources devoted to AIDS/HIV prevention and education in the PHS have increased over 40%. Given that sexual contact is a major mode of transmission for AIDS/HIV, information and education programs to prevent the spread of AIDS/HIV by changing sexual and other high-risk behaviors should have a positive spin-off effect on reducing all STDs. Likewise, the apparent association between rising STD rates and drug use, especially crack-cocaine, should be affected by the Administration's major push to expand anti-drug abuse efforts of treatment and prevention.

Mr. Early: Some public health experts argue that the increases in STDs are directly correlated with decreases in federal resources for STD control. How do you explain this association?

Dr. Roper: History has shown that there may be an association between resources for control program and STD rates. For example, since the initiation of federal assistance for syphilis control efforts in the 1940s, reported cases of syphilis declined by 89 percent from an all-time high of 575,000 cases in 1943 to a low of 64,000 cases in 1977. More recently in 1988, the intensive efforts applied to Florida and California by adding more STD caseworkers has resulted in reversals of their climbing syphilis rates. These successes appear to be directly related to the infusion of resources.

IMMUNIZATION

Mr. Early: How much would be required in FY 91 to maintain all aspects of (the) immunization program at current levels?

Dr. Roper: The 1991 budget request of $130,862,000 will maintain all current aspects of the immunization grant program at 1990 levels.

Mr. Early: If I recall correctly, one of the Health Objectives for the Nation has been the 1990 goal to achieve 90 percent immunization coverage against childhood diseases by age 2. Has this goal been achieved?

Dr. Roper: Upon school entry, at least 97 percent of children are fully immunized. State laws which require immunization for entry into school have played a very important role in obtaining these high immunization levels. Although funds in CDC's budget are sufficient to purchase the traditional Federal share of public sector support to make available the necessary vaccines for this population, we have no incentive similar to State school entry laws that would otherwise require parents to have their children immunized appropriately by age 2. Some of the funds provided by Congress for the infant immunization initiative will be used to identify intervention activities, including different incentives, to more effectively increase the age-appropriate immunization levels of our children.

Mr. Early: What is the coverage against individual diseases by age 2?

Dr. Roper: Although we have no national assessment data, we believe that overall immunization levels of children aged 2 is between 70 and 80 percent. Using funds appropriated in 1990, we are planning to obtain more exact data beginning in the fall of 1990.

Mr. Early: Have we met the goal of complete coverage with the basic immunization series? If not, how close to, or how far off, the mark are we?

Dr. Roper: We do not currently have a mechanism for measuring national immunization levels at age 2. However, we do know that at least 97 percent of children entering school are fully immunized.

Mr. Early: What have been the obstacles to meeting these goals?

Dr. Roper: Following are some of the obstacles which have been encountered while attempting to achieve this objective.

1. With CDC's decision to cease support for the U.S. Immunization Survey after 1985, we currently have no surveillance mechanism which measures national preschool immunization levels.

2. The number of children seeking immunization in the public sector may be increasing because many private physicians are no longer willing to immunize in their practices because of high vaccine costs and liability concerns.

3. Service delivery and public access may be inadequate in certain respects. Public and private medical providers often fail to take full advantage of all opportunities to vaccinate. Providers may fail to administer at each visit all the vaccines for which a child is eligible. In some areas, the child must have a complete physical examination before an immunization is administered.

4. Immunization services are not fully integrated with other public health programs such as WIC, AFDC, etc.

5. Parental motivation to have their children immunized is often lacking in lower socioeconomic groups because vaccine-preventable diseases are not a noticeable threat in our society, and there is no direct incentive for low-income parents to have their children immunized in light of other seemingly more important issues of daily living.

Mr. Early: Is it true that coverage in some large urban areas is now lower than that of some developing countries?

Dr. Roper: Studies conducted while investigating measles outbreaks indicate that measles immunization levels of 2 year old children in some inner-city areas are as low as 40-50 percent which is less than that in some developing countries. Although we have no national assessment data, we believe that overall immunization levels of children age 2 is between 70 and 80 percent.

Mr. Early: Is 90 percent coverage still a goal? If so, what are CDC's plans to achieve this goal.

Dr. Roper: Draft objectives for the Year 2000 still contain the objective of reaching immunization levels of 90 percent by age 2. Using funds which Congress provided in 1990, CDC hopes to identify various interventions and incentives which will result in this goal being achieved by the Year 2000.

Mr. Early: Have you set a new target date of when this goal could be achieved?

Dr. Roper: The new target date is the Year 2000.

Mr. Early: What additional resources would be required to implement these plans -- to achieve this goal? Go into some detail on this for the record.

Dr. Roper: We will be conducting a number of demonstrations to determine which interventions or incentives will be most effective and efficient in increasing the immunization levels of our 2 year old population. When these demonstrations are completed, we will be able to determine what activities and resources would be actually required at the Federal, State, local, and private sector levels to implement this effort throughout the Nation.

CHRONIC FATIGUE SYNDROME

Mr. Dwyer: According to the budget justification, the CDC expects to support a variety of projects for Chronic Fatigue Syndrome (CFS) in fiscal year 1991. Currently, how many surveillance sites does the CDC maintain to conduct surveillance and epidemiology activities?

Dr. Roper: Our prototype Chronic Fatigue Syndrome Surveillance and Follow-up System is based in four sites around the United States: the metropolitan Atlanta, Georgia area; Kent County (Grand Rapids), Michigan; Sedgwick County (Wichita), Kansas; and the Reno-Carson City-Lake Tahoe, Nevada area.

Mr. Dwyer: Do you believe that this is a sufficient number?

Dr.Roper: We feel that the current sites will provide an adequate number of patient referrals to allow us to estimate the incidence and prevalence of the Chronic Fatigue Syndrome and determine over time whether the incidence is increasing, decreasing, or staying the same.

Mr. Dwyer: Do you plan to increase the number of surveillance sites in fiscal year 1991?

Dr. Roper: We have no plans to increase the number of surveillance sites for the CFS surveillance system in fiscal year 1991.

LYME DISEASE

Mr. Dwyer: As you may know, New Jersey has been very hard hit by the Lyme Disease epidemic.

Don't you believe that the CDC was slow to react to Lyme Disease? What efforts have been undertaken by the CDC to make up this lag? In addition, what has the CDC learned from its initial slow start to help it with the onset of future infectious diseases?

Dr. Roper: The Centers for Disease Control has maintained nationwide surveillance for Lyme disease since 1982. As the problem has grown, CDC has increased its efforts: The current program is broad-based and has the ultimate goal of decreasing incidence of disease in high risk areas, such as the northeastern states, and preventing spread of disease to areas not now infected. The CDC program addresses current problems of more accurately defining the distribution of the disease, developing better diagnostic tests that can be standardized, developing more effective prevention and control strategies based on tick control and environmental management, and educating the lay and medical communities about this disease. In the future, CDC will continue to react to infectious disease emergencies to the best of its ability.

Mr. Dwyer: Some doctors in private practice have made me aware that they have been hesitant to contact the CDC about Lyme Disease. What efforts are being made to improve relations with physicians in endemic areas?

Dr. Roper: CDC has taken the lead in opening a dialogue between CDC scientists, state epidemiologists and physicians at the local level: better defining Lyme disease clinically and thus increase the accuracy of reporting cases. CDC staff have also taken every opportunity to address medical associations and groups on Lyme disease. Finally, considerable effort has been made to return all telephone inquiries to CDC about Lyme disease.

Mr. Dwyer: What does the CDC have planned for fiscal years 1990 and 1991 to provide and promote education and prevention initiatives for Lyme Disease? What state and local agencies will be involved in this effort?

Dr. Roper: CDC is currently in the process of developing a Lyme disease educational brochure directed at the lay community. Another brochure is being planned specifically for the medical community. In addition, CDC is sponsoring a research effort through the contracting mechanisms, to develop new and more effective approaches to prevention and control of Lyme disease. These contracts are now out for open bid and, therefore, it is not yet possible to identify which state and local agencies will be involved.

DIABETES

Mr. Dwyer: I would like to ask you some questions about the CDC State Based Diabetic Control Programs. I understand that the purpose of the diabetic program is to improve the care for diabetic patients, especially those in inner city areas and non-urban areas such as in my home state of New Jersey. In many instances, this care can be improved by providing access to all health care providers, such as podiatrists and optometrists.

In 1987, the Appropriations Committee included report language encouraging the inclusion of optometrists in the diabetes control program in order to improve access of eye care to persons with diabetes. Not only are optometrists located in rural and inner city areas, but they are qualified and licensed to diagnose and manage diabetic eye diseases.

Have efforts been made to include optometrists and general opthalmologists in the program to improve patients' access to eye care?

Dr. Roper: The CDC is providing technical and financial assistance for diabetes control programs through cooperative agreements to 30 State and Territorial health agencies. These State-based programs are designed by the agencies to address the specific diabetes-related problems they have identified within their State and to implement interventions that utilize existing State and local resources. The States promulgate policies and procedures related to the implementation of the program, usually with guidance from an advisory group of citizens who are acknowledged experts in diabetes care and public health. In 1987, the beginning of the current project, CDC provided guidelines that stated that "Examinations by other healthcare professionals such as optometrists, who have demonstrated the ability to perform sensitive diagnostic examinations" is an acceptable technique for conducting the eye care activities funded by the cooperative agreement.

At the current time, 20 of the State-based diabetes control programs utilize optometrists in screening and clinical activities. Fifteen States report that they have optometrists on their advisory groups. All States utilize general ophthalmologists in their programs and have ophthalmologists on their advisory group. All programs understand the value of including both optometrists and ophthalmologists in their activities.

Mr. Dwyer: It is my understanding optometrists have not been fully incorporated into this program. Could you please explain why?

Dr. Roper: Actually, optometrists are being included in these programs in increasing numbers and represent a valuable resource in diabetes control. The decision as to which providers to include in program activities is made at the State or local level. The CDC cannot dictate that aspect of the program implementation. The CDC's Division of Diabetes Translation staff have recently met with representatives of the American Optometric Association to discuss opportunities for cooperation in the prevention of diabetic eye disease. We have encouraged the State-based program personnel to establish communication with optometric associations at the State level, as well as with individual optometrists and general ophthalmologists who can contribute to the success of their programs.

Mr. Dwyer: It is my understanding that the CDC is in the process of updating its guide on diabetes mellitus for the primary care practitioner and the patient. I assume that the purpose for this guide is to ensure that persons who are at risk for specific disease are identified and referred for care.

Although Congress has recognized doctors of optometry as being able to detect, diagnose, and manage diabetic eye disease, it is my understanding that doctors of optometry are not mentioned in the guide -- except for being able to provide glasses -- and that patients are instructed only to see retinal specialists or an opthalmologist, experienced in the management of diabetic retinopathy, for diabetic eye problems. Why have optometrists and general opthalmologists been omitted?

Dr. Roper: The Prevention and Treatment of Complications of Diabetes Mellitus: A Guide for the Primary Care Practitioner focuses on what the primary care practitioner should do in managing patients with diabetes, not on who should perform the particular service. In fact, the Guide does not omit optometrists and general ophthalmologists as providers in the management of diabetic eye disease.

Now in the final stages of editing and revision, the content of the Guide represents the opinion of health experts throughout the Nation. Wherever it is scientifically accurate to include optometrists as providers (for example, in the detection, diagnosis, referral, and follow-up care of diabetic eye disease), the editors have done so. In many instances, in fact, they have used the general terms, "eye doctor" or "eye specialist" for primary care practitioners for referral according to the needs of their patients and the skills of the eye care professionals in their area.

CHILDHOOD IMMUNIZATION

Mr. Hoyer: One dollar spent to immunize a child saves more than $10 in childhood illness and death. In 1989, more than 15,000 cases of measles were reported, five times the number reported in 1988 and ten times the number reported in 1983. One third of the cases were among preschool-age children. More than 5,000 cases of mumps 3,500 cases of pertussis were also reported in 1989.

Can you define the size and scope of the problem of inadequate childhood immunizations for the Committee?

Dr. Roper: We currently have no accurate national assessment of age appropriate immunization levels in the United States. However, through studies conducted during outbreak control activities in 1989 and 1990, we have found that, in some inner-city areas, measle immunization levels for children in these areas may be 50 percent or lower. One of the activities initiated with the increased funds for the Infant Immunization Initiative is to measure immunization levels in children two years of age.

Mr. Hoyer: What accounts for the reduction in the parent/patient notification line item?

Dr. Roper: The projected cost of $6,047,000 was the initial estimated cost for the Federal Government to pay for the total cost of information booklets to be provided parents/patients for each dose of vaccine administered in both the public and private sectors. The current projected cost of $3,000,000 represents the cost of the Federal Government's providing printed information booklets to the public sector only, and camera-ready copies of the booklets to the private sector, as well as accounting for the recent change in the requirement regarding State specific information in the booklets, which reduced the size.

Mr. Hoyer: Does the Budget include any additional funds for immunizations over the FY 1990 Request?

Dr. Roper: The 1991 President's Budget provides an increase of $1,315,000 for the annualization of 1990 vaccine price increases and a $545,000 increase in State operations.

Mr. Hoyer: How many, if any, more children will be vaccinated?

Dr. Roper: The 1991 budget request will provide vaccine to immunize the same number of children in 1991 as were immunized in 1990.

Mr. Hoyer: The justification indicates that 98% of children entering school are immunized.

Are these children adequately immunized and can you define the problem of inadequate age-appropriate immunizations and how we can do a better job in this area?

Dr. Roper: Upon school entry, at least 97 percent of children are fully immunized. State laws which require immunization for entry into school have played a very important role in obtaining these high immunization levels. Although funds in CDC's budget are sufficient to purchase the traditional Federal share of public sector support to make available the necessary vaccines for this population, we have no incentive similar to State school entry laws that would otherwise require parents to have their children immunized appropriately by age 2. Some of the funds provided by Congress for the infant immunization initiative will be used to identify intervention activities, including different incentives, to more effectively increase the age-appropriate immunization levels of our children.

Mr. Hoyer: What was the professional judgment budget request for immunizations and what was the request that was forwarded to the OASH and the Secretary for the Immunization Program?

Dr. Roper: CDC requested $274,580,000 for the Immunization Program for 1991. which covered grants to States, program operations, adverse events reporting system, and program increases for measles control, hepatitis B elimination, and the global eradication of poliomyelitis by the year 2000. The OASH request to the Secretary was for $157,806,000.

INJURY CONTROL

Mr. Hoyer: As you may know, Dr. Roper, I am very interested in the area of injury control.

Is it not the case that the number of years of potential lives lost because of injury over the past few decades is a dismal statistic compared to many other measures of progress in public health?

Dr. Roper: Since the end of World War II, more than 6 million U.S. citizens have died from injuries. The burden of injury and injury death fall disproportionately on the young. The effect of this premature mortality is reflected in the measurement of years of potential life lost (YPLL) occurring before age 65. Injuries are the leading cause of years of potential life lost before the age of 65 and are responsible for more years of potential life lost than the next too leading causes, cancer and cardiovascular disease, combined. In fact, injuries accounted for nearly 3.7 million years of potential life lost in 1988, nearly 30% of the 12.3 million YPLL from all causes of death for that year.

Mr. Hoyer: Could you quantify the mortality and morbidity associated with injury that disproportionately impacts minorities in this country?

Dr. Roper: The burden of injury rests disproportionately among the poor--many of whom belong to minority groups. The DHHS report on minority health entitled Report of Secretary's Task Force on Black and Minority Health - January 1986, identified injury as one of 6 problem areas that cause "excess deaths" - that is the difference between the number of deaths observed among blacks and the number of deaths that would have occurred if blacks died at the same rate, for each age and sex, as whites. The 4 causes of injuries with the largest disparities in black-white deaths in 1984 were homicides, residential fires, drowning, and pedestrian mishaps. Homicides accounted for the greatest disparity in injury mortality rates between blacks and whites.

Homicide is the leading cause of death for black males 15-34 years of age and will be the cause of death for 1 black male in 28 during his lifetime. The homicide rate for blacks was 29.0 per 100,000 which is five times that for whites (5.5 per 100,000). For both males and females homicide rates were highest among young adults ages 20-39. Rates were higher for black males than any other race-sex group.

Black males had almost twice the fire death rate of black females, and over 3 times the rate of white males, and over five times the rate of white females.

Black males had twice the death rate from drowning of white males, and over seven times the rate of black females, and over eight times the rate of white females.

Black males had nearly twice the death rate from pedestrian motor vehicle collisions of white males, more than three times the death rate of black females, and over four times the rate of white females.

In 1986 there were more than 1700 excess deaths of black children compared to white children for the same four causes. Homicides accounted for almost 60% of these 1700 excess deaths. Residential fire rates for black children are three times those for whites.

Mr. Hoyer: To what extent is the injury control program examining issues associated with family violence or other social pathologies like homicide and suicide?

Dr. Roper: The injury control program examines issues associated with family violence in both its intramural and extramural activities. For example, the intramural injury control program provides leadership through its scientific research and role in policy development.

Members of CDC are key participants on national advisory committees such as the Federal Interagency Task Force on Child Abuse and Neglect whose purpose is to develop and implement a coordinated federal plan related to child abuse and neglect. In addition, CDC employees served as members of the "Assault and Suicide Working Group" for the National Institute on Child Health and Development whose work will establish standard childhood injury definitions which will be important for injury researchers. Also, we are major players in shaping the Year 2000 Health Objectives for Violent and Abusive Behavior. Furthermore, we are preparing to hold a national conference which will lead to the development of recommendations for future research and evaluation of demonstration projects designed to reduce youth violence in minority communities. Also, we have provided financial assistance in support of the New England Conference on Violence to be held this summer. Recommendations regarding public policy and legislation to reduce and prevent violence will be made to governors in that region.

The injury control program has taken a leadership role in conducting a number of epidemiologic and other studies which focus on violence as a public health problem. More specifically, in the area of family violence we are analyzing the results of the Family and Intimate Assaults in Atlanta project. This project was designed to examine fatal and nonfatal assaultive injuries among family members and acquaintances. A first report on the results of this project entitled, "Magnitude and Patterns of Family and Intimate Assault in Atlanta, Georgia, 1984," will be published in the spring issue of Violence and Victims. Additionally, we published a report on fatal violence among spouses which examined patterns and trends in homicides between marriage partners in the American Journal of Public Health.

In the area of self-inflicted violence such as suicide, we have focused on the prevention of youth suicide, because of the increasing suicide rates in that age group. One project is designed to identify, catalog, and assess the effectiveness of exemplary youth suicide prevention programs. Another project is examining the feasibility of using emergency departments for the surveillance of suicide attempts. A third project is a case-control study of serious suicide attempters which will examine three putative risk factors for suicide, namely alcohol use and abuse, mobility, and exposure to other persons' suicidal behavior. Also, an epidemiologic study is underway in Nevada to assist the Department of Health in Nevada to better characterize suicide morbidity and mortality.

We have just published a report in the Journal of the American Medical Association entitled, "Firearm-Related Assaults on Los Angeles Roadways," and another in Violence and Victims entitled, "Increases in Premature Mortality Due to Homicide--United States, 1979-1985." Both reports provided an epidemiologic description of the patterns and impact of firearm-related assaults and mortality. Additional work includes collaboration with the Detroit Health Department on an evaluation of the impact of an ordinance in Detroit prohibiting the carrying of concealed firearms in public. Also, we are completing our analyses of a study of Youth Homicide in Los Angeles, which was conducted in collaboration with the Los Angeles Police Department. The purpose of this investigation was to examine an apparent increase in gang-related youth homicide. We are working with the University of Texas Medical Branch to analyze population-based firearm morbidity and mortality injury data for Galveston, Texas. Finally, we completed a pilot study using the National Electronic Injury Surveillance System, to estimate firearm-related morbidity. The revised protocol will be pilot tested in this year.

In the area of violence against children, we are conducting two studies. First, we are working with the State of Georgia to examine an apparent increase in reports of child abuse and neglect and to determine the feasibility of establishing an ongoing surveillance system. Second, we are analyzing FBI data to describe patterns and trends in child homicide.

During FY 1990, through our capacity building efforts, 15 State and local public health agencies were awarded grants designed to enable them to build their capacities in injury control. Each of these grant recipients has been asked to develop a plan for how they will address intentional injury. Currently, six of these programs have been designed and will implement such projects. In Missouri and New York City, projects focusing on intentional injury will be targeted for the black population. Minnesota will institute a "positive parenting" project designed to address family violence. The State of Maryland will conduct a prevalence survey with violence as the focus. Colorado and Washington will address suicide. In addition, Massachusetts was awarded grant funds for Applied Methods in Injury Surveillance, with the focus being surveillance of stab and gunshot wounds.

Through the injury control program's extramural research activity we have awarded grants to:

- Examine whether a firearm kept in an urban household increases or decreases the probability that a resident will be the victim of a homicide in his or her home.
- Establish the epidemiology of intentional injury during pregnancy and the effects on maternal and child health. The results of this research should help clinical practitioners in identifying and referring battered women.
- Improve the process of recognizing adolescents at risk for suicide and obtaining appropriate preventive care for them.
- Develop, implement, and evaluate the application of a middle school violence prevention curriculum that reduces violence.
- Evaluate two different therapies for men who have battered their wives.

Mr. Hoyer: Will you expand on the planned activities in this area in FY 91?

Dr. Roper: We plan to carry on the work I just mentioned. During FY 1991, we are scheduled to implement the suicide case control study and the Violence Prevention in Minority Communities Conference. Continuation funding will be available for State and local public health agencies awarded grants for Injury Capacity Building or Applied Methods in Injury Surveillance. Each of these agencies is developing an intentional injury plan and/or implementing projects with that focus.

Mr. Hoyer: Is this budget for injury control adequate in your professional judgment, and would you please provide the budget request for this activity made to the OASH, the Secretary, and OMB for FY 1991?

Dr. Roper: The $22,600,000 requested for injury control for fiscal year 1991 will allow us to continue to address this important problem at the current level of effort. The CDC budget request to OASH for fiscal year 1991 included $50,000,000 for injury control. The OASH requested $19,760,000 to the Secretary and the Secretary requested $19,760,000.

TUBERCULOSIS

Mr. Hoyer: The justification indicates that various components of the TB elimination program are underway. What steps in 1991 will be taken to further the plan and how much will we spend relative to FY 1990?

Dr. Roper: With spending requested at the same level in FY 1991, CDC will continue those elements of the Plan enhanced or initiated in FY 1990. We will also continue to work with other Federal, State, and local providers to build the coalitions necessary to achieve our goal. Tuberculosis has retreated into focal geographic areas and demographically well-defined populations which can be targeted for intensified control and elimination efforts.

Mr. Hoyer: How much will it cost this country and how long will it take us to eliminate this infectious disease given the populations that are most susceptible to the infection given the rate of spending reflected in the budget request?

Dr. Roper: The Strategic Plan for the Elimination of Tuberculosis in the United States calls for TB elimination to occur by 2010. If the increase in TB continues at the same rate as it has over the past five years, and if Federal TB prevention and research expenditures stayed constant at about the proposed 1991 level of $20 million, and if no new scientific breakthroughs in TB treatment or prevention occur, then we estimate that TB will not be eliminated until after the year 2072.

Mr. Hoyer: Does the CDC have an estimate of optimal spending in this area that would help us achieve the goal more quickly?

Dr. Roper: The following table shows estimated budgets for CDC, FDA, and NIH/HIAID that would be needed to fully implement the Plan and achieve elimination by the year 2010. All monetary figures represent 1990 dollars. Given competing priorities, though, CDC and NIH plan to spend about $21 million in 1991 toward implementation of the Strategic Plan to eliminate TB.

TUBERCULOSIS--COSTS

Year(s)	CDC $ (Yr.*)	FDA $ (Yr.*)	NIAID $ (Yr.*)	Total Expenditures
1990	$36.0	$3.5	$16.0	$55.5
1991-1994	144.0(36.0)	5.6(1.4)	64.0(16.0)	213.6
1995-1997	18.9(6.3)	0	24.0(8.0)	42.9
1998-2000	9.3(3.1)	0	1.5(0.5)	10.8
2001-2010	15.0(1.5)	0	0	15.0
Totals (Million)	$223.2	$9.1	$105.5	$337.8

*Annual Budget

CHILDHOOD LEAD SCREENING

Mr. Hoyer: Last year the Committee appropriated funds for a lead screening, referral, and outreach program. How much are you spending in FY 1990 and how much do you anticipate spending in FY 1991?

Dr. Roper: For FY 1990, we are spending $3,949,000 to support the childhood lead poisoning prevention program. For FY 1991, the President's budget includes $3,949,000. Some States are also using funds from the Prevention Block grant to support lead screening activities.

Mr. Hoyer: How many jurisdictions will be funded in in FY 1990 and 1991?

Dr. Roper: Both in FY 1990 and FY 1991, the grant program will support comprehensive screening and follow-up programs in up to 6 States, counties, or cities with a demonstrated severe childhood lead poisoning problem.

Mr. Hoyer: What is the actual need in this area, and how much would it cost?

Dr. Roper: An estimated 250,000 children are thought to have blood lead levels above 25 ug/dl, and over 3 million children are thought to have blood lead levels above 15 ug/dl, levels high enough to cause decreased intelligence, behavioral disturbances, delayed development, and other adverse health effects. While children are affected in all parts of the country and in all socioeconomic strata, childhood lead poisoning disproportionately affects poor, inner city, and minority children.

The financial costs to the Nation to eradicate lead poisoning through further lead abatement efforts have not been precisely calculated, but are believed to be significant. Additional expenditures for lead screening activities could be utilized effectively, given that, based on The Nature and Extent of Lead Poisoning in Children in the United States: However, CDC is not requesting additional resources for this purpose within the overall priorities of the 1991 President's budget proposal.

Mr. Hoyer: How closely and effectively do you work with other Federal agencies involved in this area?

Dr. Roper: CDC works cooperatively and effectively with many Federal agencies to prevent childhood lead poisoning:

- In 1988, the National Institute of Building Sciences (NIBS) received a contract from HUD to develop guidelines for lead-based paint testing and abatement in public and Indian housing. CDC participated in the development of these guidelines, which were delivered to HUD in February 1989. Since then, CDC has continued to work with HUD on revising and reviewing the guidelines. Release of these guidelines is expected in April 1990.

- HUD has a demonstration project designed to evaluate alternative methods of lead-based paint abatement. CDC has been evaluating worker exposure at these projects. On the basis of data collected to date, CDC has provided HUD with interim recommendations. Involvement in this project is ongoing.

- CDC participates on a HUD-EPA task force to examine issues related to lead-based paint and a special subcommittee to evaluate implementation of the recommendations of the Report to Congress on The Nature and Extent of Childhood Lead Poisoning by the Agency for Toxic Substances and Disease Registry.

- CDC has an interagency agreement with the EPA to provide technical consultation on the EPA soil removal demonstration project. This project is designed to evaluate the efficacy of removing residential soils in reducing children's blood lead levels.

The CDC also works cooperatively with the following Federal agencies that have agendas to limit exposure to lead:

- Food and Drug Administration (FDA) - Regulatory actions by the FDA have reduced lead in food, serving-storage dishes, and food containers.

- Consumer Product Safety Commission (CPSC) - CPSC has limited the amount of lead in consumer paints, furniture and toys.

- Health Resources and Services Administration (HRSA) - HRSA administers the Maternal and Child Health Block Grant that States have utilized for childhood lead poisoning prevention activities.

SEXUALLY TRANSMITTED DISEASES

Mr. Hoyer: The justification indicates that STDs are the largest communicable disease problem we face. Prince George's County has one of the highest incidences of STDs, much of it associated with adolescent substance abuse and the exchange of sex for drugs. Could you describe the parameters of the problem as we enter the decade of the nineties and the level of progress we are making, if any.

Dr. Roper: The parameters as outlined in the justification are sobering. Infectious syphilis has continued to increase into the 1990s at levels unprecedented since the advent of penicillin therapy; resistant gonococcal infection is steadily increasing; chlamydial infections account for twice as many cases as gonorrhea; and studies on human papillomavirus show an association with the development of cervical dysplasia. However, substantial progress continues to be made in the effort to prevent and control sexually transmitted diseases. For example, the effort to reduce unsafe sexual behavior, while receiving mixed reviews, has clearly worked among white men who have sex with other men. During the 1980s, sharply decreasing rates of syphilis, gonorrhea, hepatitis B, and enteric infections in this group attested to the behavioral impact of HIV and STD prevention messages. Unfortunately, in other groups, STD trends imply that safer sexual behaviors have not yet been adopted and clearly more effective targeting of these messages to those populations at highest risk must occur.

Since 1985, substantial advances in the development of prevention and control programs for chlamydia have occurred. In 1989, over 60,000 patients with chlamydial infection were interviewed regarding their sex partners, and nearly 50,000 sex partners were referred for examination. Over 1.4 million women were screened for chlamydia, with 14 percent found to be positive. As a result of these activities, over 80,000 potential cases of genital chlamydia infections were prevented. These activities reflect a three-fold increase over those delivered in FY 1988 and are expected to continue in FY 1990.

Similarly, although gonorrhea morbidity increased slightly during FY 1989 for the first time in four years, the reduction of gonorrhea morbidity since 1981 has been substantial. In FY 1989 when 750,100 cases were reported, partner referral activities resulted in the prevention of 181,700 cases of uncomplicated gonorrhea and 11,500 cases of pelvic inflammatory disease.

Mr. Hoyer: Why is there only a $114,000 increase for STDs in the FY 1991 budget "if this is the largest public health problem we face"?

Dr. Roper: Sexually transmitted diseases are one of the Nation's most serious public health problems. The 1991 budget for CDC requests substantial increases for the most devastating of the sexually transmitted diseases and what we consider to be currently the most serious public health problem of this century, HIV.

Mr. Hoyer: What more could CDC do to enhance the State and local health department's fight against this problem, and what in your professional judgment should CDC be spending in this effort in FY 1991? Can you outline for the Subcommittee a few priorities in this area that CDC would target given additional funds over the request?

Dr. Roper: There are always more opportunities for improvements than resources to support them. If additional funds were available, first, we would bolster the prevention and control of genital ulcer disease among minority populations. Approximately $16 million a year is needed to address the recent increases in genital ulcer disease which have occurred among heterosexuals in these populations. Another contributing factor is the foci of disease among this same group who are crack cocaine users and who, increasingly, are exchanging sex for drugs. This upsurge has created a critical need to target STD prevention and control measures to this population. Specific activities would be to emphasize research to investigate the link between illegal drug use, prostitution, and genital ulcer infections and their implications for HIV transmission. Surveillance activities would include development of comprehensive automated STD information management systems at the State and national levels, and would expand and refine syphilis surveillance in each STD project area to include screening of the highest risk populations.

While substantial progress has been made in the area of chlamydia control, Chlamydia trachcomatis remains the most prevalent of the bacterial sexually transmitted diseases in the United States today, with an estimated 4 million infections annually. The estimated direct and indirect costs as a result of the chlamydia epidemic is over $4 billion annually. Further growth in the economic burden will occur as the prevalence of this infection continues to increase. Expanding the national sentinel surveillance system for chlamydia would be a critical part of this prevention and control program. Currently, 33 states have reporting laws. An increase over the requested amount would provide for grant awards to all states for the development and implementation of screening and disease intervention programs. Additional funds would also support expanded research and demonstration activities to assure that recommendations related to chlamydia prevention and control are state-of-the-art. An additional $40-$45 million a year would be required to implement such a screening and follow-up program.

Finally, we would expand the environmental focus for STD control to correctional facilities. Review of the STD literature indicates that the most likely site to find someone infected with an STD, outside of an STD clinic, is in a prison. The CDC would, if additional funds were available, develop demonstration projects for the prevention and control of STD and HIV using the prison system of this country as the site for early diagnosis and treatment interventions. In addition, strategies involving selective mass treatment of those groups with the highest STD prevalence would be evaluated. Pilot projects in four to six sites would be require approximately $5 million.

BREAST AND CERVICAL CANCER

Mr. Hoyer: The Committee provided funds for a breast and cervical cancer screening program in FY 1990. 50,000 women a year die from breast and cervical cancer.

Could you outline both the problem of inadequate testing and follow-up and how the CDC program helps save lives?

Dr. Roper: A substantial number of deaths from breast and cervical cancer could be prevented through a comprehensive systematic program of early detection and appropriate follow-up.

o It is estimated that mortality from breast cancer could be reduced by more than 30 percent if women were screened according to current guidelines. Survival from breast cancer is significantly improved if it is detected early. Yet only one-half of all women with malignant breast cancer in this country are diagnosed when their disease is still at an early stage. This is true despite the proven value of mammography and physical examination in the early detection of this disease.

o Although mortality from cervical cancer has decreased 70% during the last 35 years, the fact that an estimated 6,000 women will die this year from this disease is tragic given the effectiveness of early detection and treatment for cervical cancer. While the Pap smear tests have been used for more than 40 years, 27% of women in this country have not had a Pap smear test in the previous 3 years. Essentially all deaths from cervical cancer are preventable. However, underutilization of screening and lack of prompt diagnostic follow-up and treatment continue to result in unnecessary death in this country from this disease. Recognizing this, the Congress included provisions in the 1989 Omnibus Budget Reconciliation Act (OBRA '89) that allows Medicare to cover the cost of cervical cancer pap smears for female beneficiaries. HCFA estimates that the Medicare program will spend $40 million for pap smears in 1991.

o In order to substantially reduce deaths from breast and cervical cancer, the following needs to be addressed: availability of screening; appropriate follow-up and prompt treatment of those with abnormal test results; public and provider education on the value of current guidelines for screening; quality assurance of the screening procedures; and timely monitoring of the effectiveness of these activities.

Mr. Hoyer: How much is spent on the program in FY 90 and FY 91?

Dr. Roper: In FY 90 and FY 91 CDC will spend $4,926,000 on activities directed at reducing deaths from breast and cervical cancer.

Mr. Hoyer: Could you provide an outline of CDC projections of how many lives could be saved given a fully funded screening, referral, and outreach program?

Dr. Roper: A substantial number of deaths from breast and cervical cancer could be prevented through a comprehensive systematic program of early detection and appropriate follow-up. For example:

- It is estimated that mortality from breast cancer could be reduced by more than 30 percent if women were screened according to current guidelines. Since currently 43,000 women die yearly from breast cancer, approximately 13,000 lives could be saved each year from a program that reached all women. These numbers will increase in the future since the aging population means that more women will be reaching the ages of highest risk.
- Essentially all 6,000 deaths from cervical cancer are preventable.

Thus, nearly 200,000 of the 500,000 deaths from breast and cervical cancer that will occur during the decade could be prevented.

Mr. Hoyer: I want to complement you on the CDC's recent decisions relating to the U.S. immigration policy on HIV-infected individuals. Could you explain precisely CDC's position its consequences and the actual impact of this action on the plans of HIV-infected individuals may plan to visit the United States?

Dr. Roper: A Notice of Proposed Rulemaking (NPRM) to remove chancroid, gonorrhea, granuloma inguinale, lymphogranuloma venerum, infectious syphilis, and infectious leprosy is under consideration. This proposal would modify 42 CFR Part 34.2(b), Medical Examination of Aliens, by deleting six of the eight currently listed diseases. If this proposal is approved, aliens suffering from any of these conditions will no longer be excluded. This will leave only infectious tuberculosis and HIV infection on the list as excludable diseases.

Since HIV infection was added by statute to the list of dangerous contagious diseases, we did not propose to delete it from the list in this NPRM. Consequently, the current statute requiring non-immigrants with HIV infection to apply for a waiver to enter the United States will continue.

Mr. Hoyer: As a Public Health Official what is your professional view of this issue?

Dr. Roper: Aliens with these diseases can no longer be considered a significant public health threat to the United States. The sexually transmitted diseases proposed for deletion, as well as HIV infection, are not transmitted by casual contact, through the air, or from common vehicles - such as fomites, food, or water. Therefore, an infected person in a common or public setting does not place another individual inadvertently or unwillingly at risk. Rather, these diseases are primarily spread through voluntary exposure.

AIDS COUNSELING AND TESTING

Mr. Hoyer: To what extent is the CDC satisfied that AIDS counseling and testing initiatives and associated early intervention strategies are adequately funded?

Dr. Roper: Demand for HIV counseling and testing services in public sites has steadily increased since services were first offered beginning in fiscal year 1985. In fiscal year 1985, 79,000 tests were performed; of these, 13,700 were HIV positive. In fiscal year 1989, 1,015,000 tests were performed and 44,900 were positive. Not only has the number of tests continued to increase but the number and types of facilities where services can be obtained has also increased. As the benefits of early detection and early intervention become more widely understood by persons at risk of infection, we anticipate that the demand for this critical service will continue to increase.

CDC's fiscal year 1991 budget for HIV counseling testing and partner notification has been reviewed and the Administration has determined that the amount requested is adequate to meet the need.

CDC's fiscal year 1991 budget of $99,844,000 for HIV counseling testing and partner notification is an increase of $7,319,000 over 1990. We believe that the expected increase in demand for services can be met with resources at the level requested in 1991 for counseling testing sites.

AIDS - CRITERIA FOR DIAGNOSIS

Mr. Hoyer: What was the initial budget figure for this category of spending and how would those funds have been expended?

Dr. Roper: CDC initially submitted a fiscal year 1991 request to PHS for an additional $273.1 million for counseling and testing. The additional funds would have been utilized to fully fund the estimated HIV counseling and testing needs for the entire public sector.

Mr. Hoyer: In September, 1987, CDC developed the current criteria for AIDS diagnosis. In order to qualify for an AIDS diagnosis (and therefore qualify for early intervention treatments and clinical trails) a person must have laboratory confirmation of HIV infection and one or more of 27 different symptoms or diseases. NOT included are a number of important women-specific infections such as cervical dysplasia, pelvic inflammatory disease, or chronic vaginitis--which studies are suggested may be primary indicators of HIV disease in women. How are you dealing with this new evidence?

Dr. Roper: HIV infection may result in a spectrum of illnesses, including severe illnesses requiring hospitalization or resulting in death, all of which are not captured by the current AIDS case definition. CDC is currently conducting a study among men and women in select sites to assess the spectrum of HIV-related morbidity in defined geographic regions and to evaluate the ability of the AIDS case definition in capturing persons with severe HIV-related morbidity. The results of these studies will help in revising the CDC classification system and the AIDS surveillance case definition.

Mr. Hoyer: Is CDC currently supporting any clinical trails for pregnant women?

Dr. Roper: CDC is not currently supporting any clinical trials for pregnant women.

Mr. Hoyer: What is CDC doing in regards to women-focused preventions, specifically nonoxynol-9 and virusides?

Dr. Roper: The CDC is not developing interventions that use nonoxynol-9 and virusides specifically. However, CDC, in collaboration with Zairian and Belgian investigators, is evaluating the safety and efficacy of spermicides in preventing HIV infection in high risk women. CDC is also studying the etiologic relationship between contraceptive use and HIV transmission, as well as examining the behavioral determinants of contraceptive choices among women of reproductive age. Findings from these studies should help CDC to develop more effective interventions for women.

AIDS EDUCATION

Mr. Hoyer: Because there is no vaccine and no cure for AIDS, the real weapon against this deadly infectious disease is education. In the past five years the Federal government has spent more than one billion dollars on AIDS education. And it seems as though in the white homosexual community, the message is getting through: The incidence of AIDS transmission is actually decreasing. That's the good news. The bad news, however, is that AIDS is still rapidly increasing among women, minorities, and intravenous drug users (IVDUs), and the projections for the future are very grim. Because of this, I am seriously concerned as to whether AIDS education is reaching these populations. How many Community Based Organizations (CBOs) are currently funded by CDC?

Dr. Roper: Through the FY 1990 HIV prevention and surveillance cooperative agreements, 514 minority and other community-based organizations (CBOs) were funded. In addition, CDC directly funds 72 minority and other CBOs. CDC will also provide direct funding to about 30 additional minority CBOs in fiscal year 1990.

Mr. Hoyer: Of these, how many have programs aimed at women with AIDS, and what are their funding levels.

Dr. Roper: CDC provides funds and technical assistance to State and local health departments and national and community- based organizations for prevention programs directed to persons at risk (including women) of acquiring or transmitting HIV infection. Many of these programs provide services to women. Perinatal HIV prevention projects focus on women of childbearing who are infected or at high-risk of HIV infection. A total of $10,195,000 was awarded to support activities targeted to those women of childbearing age. In addition, $6,584,200 was awarded to 40 CBOs that target women of childbearing age. Additional funds ($14,043,000) and requested in fiscal year 1991 to prevent HIV among women and infants.

Mr. Hoyer: Can you tell us what specific health education programs you are currently funding for women and AIDS prevention; and what is the funding level for this?

Dr. Roper: A total of $10,194,981 was awarded, through the fiscal year 1990 HIV prevention and surveillance cooperative agreements with State and local health departments, to support activities which target women of childbearing age who are at risk of HIV infection. Specifically, State and local health departments and national and community-based organizations are provided funds to carry out prevention activities such as counseling, testing, and partner referral; health education/risk reduction; and referral to providers of other needed services. Many of the activities and services supported are provided by family planning clinics, various women's health organizations, and other health department clinics which serve women. Thus, the amount awarded includes those funds which were awarded in all object classes for support of educational programs for women -- not just contractual funds awarded to CBOs -- throughout the four HIV prevention program components.

Although CDC is not currently providing financial support, technical assistance is being provided to the Office of Population Affairs (OPA) to develop strategies for incorporating HIV prevention education into ongoing family planning programs. CDC is also assisting OPA in providing training in HIV-related prevention activities to health care providers working in family planning clinics. In fiscal year 1991, CDC is planning to initiate targeted interventions in select, extremely high incidence cities to prevent HIV infection among women and infants.

Mr. Hoyer: I understand that many AIDS treatment and prevention programs are not successful in serving women because they do not provide important support services, like child care and transportation. What is CDC doing to encourage CBOs to offer these important support services?

Dr. Roper: Requests for financial support to provide child care and to lease vehicles for transportation have been approved during budget negotiations with directly funded community-based organizations. In these instances, support of such services must be deemed essential to the success of the project.

Mr. Hoyer: I understand that most of the funds that CDC receives from the Federal government goes to States. Do those CBOs which receive funding from CDC for targeting minorities and intravenous drug users have specific programming for women?

Dr. Roper: The majority of funds awarded in the Minority component HIV prevention and surveillance cooperative agreements with State and local health departments support contracts with organizations who provide education and outreach to minority populations. In fiscal year 1990, $704,800 was awarded in the Minority component to support 21 organizations that direct services specifically to women of childbearing age. In addition, $323,200 was awarded in the Minority component to support 10 organizations serving IV drug users. CDC does not have information to determine how many of the funded community-based organizations that provide services to IV drug users and their sexual partners specifically provide services to women. Many women, however, are provided services directly or indirectly by the education of their sexual partners about how to avoid becoming infected or transmitting the virus.

In addition to funds awarded through the HIV prevention and surveillance cooperative agreements with State and local health departments, $ 6,584,200 was awarded to 40 CBOs that target women of childbearing age through the HIV prevention projects with minority and other community-based organizations.

Mr. Hoyer: I understand that most of the funds that CDC receives from the Federal government goes to the States. Does CDC monitor the use of these funds as they are directed toward women, minorities, and IVDUs?

Dr. Roper: Yes, CDC does monitor the use of those funds. A summary of those funds awarded through the fiscal year 1990 HIV prevention and surveillance cooperative agreements with State and local health departments to support activities which target the above-mentioned groups is as follows:

- $10,195,000 was awarded to support activities targeted to women of childbearing age. These funds span all object classes (not just contractual funds awarded to CBOs), and include all prevention program components.
- $19,374,100 was awarded to support activities targeted to IV drug users. These funds span all object classes (not just contractual funds awarded to CBOs), and include all prevention program components.
- $14,084,800 was awarded for contracts with 359 organizations, to support education and outreach activities for minority populations.

In addition, CDC provides funds directly to 72 CBOs.

- $6,584,200 was awarded to 40 organizations that target women of childbearing age.

- $7,169,000 was awarded to 43 organizations that target IV drug users.

- $8,508,800 was awarded to 55 organizations that target minorities.

Please note that many of the organizations funded via this mechanism do not target one population in particular. Thus, these figures are not mutually exclusive; we often find that those organizations listed as providing services to women may also be providing services to minorities and IV drug users as well.

CDC Project Officers are assigned to individual cooperative agreements to provide technical assistance and monitor ongoing activities. In addition, monitoring of these activities by CDC is accomplished by reviewing quarterly progress and statistical reports, which are required from all cooperative recipients.

Mr. Hoyer: How well are the States doing in targeting AIDS education and prevention toward women, minorities, and IVDUs?

Dr. Roper: The fiscal year 1990 Program announcement for HIV prevention and surveillance cooperative agreements explicitly targeted IVDUs, minorities, and women, particularly of child bearing age. The targeting of these groups was reinforced with the States during budget negotiations. State activity in these areas is monitored by CDC project officers during the course of site visits and through the review of quarterly narratives, statistical reports, and other information received by CDC. From a review of the available data, it appears that the majority of programs are on track.

INFANT MORTALITY

Mr. Pursell: In your testimony Dr. Roper, you state that infant mortality continues to be a major problem in the United States, and that the U.S. has fallen from 7th to 22nd among developed Nations in its infant mortality rate over the last two decades.

I am assuming this is more a result of our rate increasing, rather than other nations improving upon their own health care delivery systems.

To what do you attribute the U.S.'s declining performance in this regard? Drug use among pregnant women? An increase in the number of teenage mothers?

Dr. Roper: While the U.S. infant mortality rate declined throughout the 1980's, infant mortality rates in other countries have dropped at an even faster pace than the U.S.

There are several reasons why our infant mortality rate has been so resistant to improvement:

- The rate of low birthweight, a major determinant of infant mortality, has remained high at a rate higher than other developed countries.

- The percent of women entering prenatal care early in their pregnancy has shown little improvement and is lower than other developed countries.

- The U.S. lacks universal full coverage for prenatal care, which is available in many other countries.

- There are higher numbers of teenage and unplanned pregnancies than in other countries, and these pregnancies have an increased risk of infant death.

- Cigarette smoking and use of alcohol during pregnancy are leading contributors to poor pregnancy outcomes in the U.S.

- The full impact of drug use on pregnancy outcome is unknown.

Mr. Pursell: Are the overwhelming percentage of infant deaths attributable to lack of proper care, lack of good prenatal nutrition, and other factors such as drug, alcohol, and cigarette use? That is, would most of the deaths be preventable if certain measures were taken?

Dr. Roper: The CDC has estimated that at least 30% of infant deaths could be prevented if this Nation were to fully implement what we know will work:

Within its mission to prevent unnecessary deaths, disease, and disability, CDC has identified a number of key issues that are critical to the reduction of infant mortality related to low birthweight including:

- Receiving adequate prenatal care.

- Control of preventable causes such as infection and injuries.

After the successful application of known interventions, the black/white gap in low birthweight and infant mortality should be greatly diminished. However, racial and ethnic disparities in low birthweight and infant mortality are not completely understood, and more epidemiologic research needs to focus on identifying the next generation of interventions, especially those designed to reach populations not currently being served.

Mr. Pursell: Do you have a very large problem with mothers, particularly teenage mothers and undereducated mothers, not following their doctors' advice, when they have access to prenatal care?

Dr. Roper: OPA and HRSA have primary responsibilities in these program areas, and CDC is not directly involved in the implementation of prenatal care services. Nevertheless, we do support information systems that provide insights on high rates of behaviors that put mothers and infants at risk. CDC's Pregnancy Risk Assessment Monitoring System (PRAMS) is designed to assist States to understand the influence of behavioral factors on infant mortality and low birthweight. Mothers are asked about their pre-pregnant and prenatal behaviors, their experience of complications during pregnancy, and their use of health care during pregnancy and the first months of the infant's life.

PRAMS can provide some information about advice given to women as a part of their prenatal care. For example, PRAMS data can be used to measure (a) the prevalence of cigarette smoking before and during pregnancy and after delivery; (b) if, during prenatal care, a woman was asked whether she smoked; and (c) whether women who smoked received counseling about the adverse effects of smoking. The same type of measures can be made related to the use of alcohol.

Mr. Pursell: Part of CDC's mission is to provide access to maternity care, but does CDC have any follow-up program, perhaps home-based, to supplement these efforts?

Dr. Roper: No, we do not have that responsibility, the Health Resources and Services Administration (HRSA) is the lead Public Health Service agency for maternal and child health service delivery. HRSA supports infant follow-up programs, outreach and case management activities, some of which include home visits.

Mr. Pursell: Your FY 91 request includes an increase of $11.5 million for the Infant Mortality Initiative. You state that part of this would be used to collect data on maternal nutrition and cigarette and alcohol use.

We already know too many women are using alcohol and aren't getting proper nutrition. Wouldn't it be a better use of our limited resources to use more of these funds to improve access to prenatal care?

Dr. Roper: Access to prenatal care is a major policy issue facing the U.S. The CDC Infant Mortality Initiative is part of the response to improving access. Even when all women have access to prenatal care services, States will have problems with inadequate capacity of their health care systems to target and effectively serve groups at highest need. CDC can contribute to efficient use of prenatal care resources through State-based surveillance, which will allow states to identify and target services to populations in greatest need. For example, approximately 25% of women in the U.S. smoke, but smoking is as high as 40% among women receiving WIC and public prenatal care. Few pregnant smokers stop on their own, and many public health clinics currently do not provide adequate counseling to help pregnant women quit. The CDC 1991 Infant Mortality Initiative will provide technical assistance to States that want to develop cost efficient smoking cessation programs that appeal to women who receive prenatal care services in public health settings.

By coordinating major efforts with States, CDC will help States narrow the gap between black and white infant mortality. To illustrate the impact of this strategy, Mississippi called on CDC to help reduce its consistently high infant mortality rate. Epidemiologic studies in Mississippi revealed problems with infant death reports, long waiting periods for family planning services, and high perinatal mortality rates throughout the State. In response, Mississippi changed laws regarding coroners and autopsies, initiated infant death review studies, launched a home-based case management intervention study, legislated a comprehensive perinatal plan, and improved management of family planning clinics. These efforts have resulted in a reduction of the perinatal mortality rate in Mississippi.

MEASLES

Mr. Pursell: You have testified in your written statement that CDC projects that it can eliminate measles by the year 2000, yet you also note concern with a recent outbreak of measles. The 16,000 cases reported in 1989 were five times the number reported in 1988, and 43 deaths were reported in 1989.

Michigan has been very hard hit by this outbreak, in 1989 and this year. It reported 359 cases in 1989, and has already reported 220 cases in 1990, including one death.

You have stated that fewer than 80 percent of all two-year-olds are immunized, yet only one-third of reported cases occurred among children under five years of age. Most of the recent outbreak is among high school- and college-aged students.

How important is it to have a second vaccination? Wouldn't a second vaccination have prevented most of these recent cases?

Dr. Roper: The ACIP and the American Academy of Pediatrics both recommend a second dose of MMR vaccine to prevent outbreaks of measles. A second measles dose is designed to prevent the occurrence of measles in those children who did not achieve immunity to the disease from the first measles vaccination. CDC agrees with these recommendations. The ACIP did not formally publish its recommendations for a second dose until December of 1989.

The impact that a second measles vaccine would have had on preventing any of the 16,000 cases that occurred in 1989 would have depended on when and to what group of children the vaccines would have been given in 1989. The ACIP recommends that the second dose of vaccine be administered at the time of the child's first entry into school. The 2nd dose recommendation would have no direct impact on measles among preschool-aged children. The primary cause of measles in the preschool population was the failure to have received even the first dose of measles vaccine, or exposure to the disease prior to becoming old enough to qualify for the first vaccination. The benefits from administering a second measles dose to children entering school are not expected to be immediate. When fully implemented, this approach is expected to prevent the 35% to 40% of cases affecting all children ≥ 5 years of age who appear to be vaccine failures, and it may indirectly protect unvaccinated persons since the risk of exposure to measles will decrease.

The majority of the measles cases caused by vaccine failure in 1989 occurred in older children or college students. If a one-time vaccination catch-up of all school-age children (between the ages of 5 and 18) had occurred in 1989, then 30% of the 16,000 measles cases in 1989 might have been prevented. However, both the ACIP and the AAP state that the two dose schedule will generally be implemented one age group at a time. Consequently, some years will pass before all students in schools have received two doses. Therefore, the ACIP recommends that all children in affected schools receive a second measles dose as part of measles outbreak control effort. It is difficult to assess how many cases outbreak control prevents.

The ACIP also recommends that all entering college students be required to provide documentation of prior measles immunity, or be administered a second dose of measles vaccine. If all entering college students who could not provide this evidence had received a second dose of measles vaccine in 1989, then approximately 5% of the 16,000 measles cases in 1989 could have been prevented.

Mr. Pursell: Has CDC earmarked any vaccination funds for second doses, and how much money would be required to provide for booster shots nationwide?

Dr. Roper: Funds to support the public sector purchase of the second dose of MMR vaccine are not included in the 1991 budget request.- The current estimate of the vaccine cost for the second dose of MMR for all of the public sector (i.e.Federal, State, and local governments) is $47.1 million a year.

CHRONIC DISEASE PREVENTION

Mr. Pursell: CDC's Center for Chronic Disease Prevention and Health Promotion assists the States to implement a program to prevent and control chronic diseases.

How many states are receiving assistance in FY 90?

Dr. Roper: The funding provided for chronic disease prevention and control activities has enabled CDC to:

- Assist 22 States and a Territory in establishing comprehensive chronic disease control programs, many focusing on minority and medically-underserved populations.

- Assist 44 communities in 17 States in developing and evaluating interventions for chronic diseases such as cardiovascular disease and lung cancer.

- Assist 46 States and the District of Columbia in tracking risk factors for chronic disease such as smoking, hypertension, sedentary lifestyle, obesity, and elevated cholesterol.

Mr. Pursell: Will additional states receive assistance in FY 91?

Dr. Roper: No additional States will receive assistance to implement programs to prevent and control chronic disease. The funds requested for FY 91 for chronic disease will allow CDC to maintain support and technical assistance to those States already receiving assistance.

Mr. Pursell: How many years do you typically provide assistance to an individual State under this program?

Dr. Roper: States were given the option to request support for up to 5 years under this program. All of the States receiving funding are approved for funding for over one year with the majority receiving support for the full five years.

Mr. Pursell: Approximately 70 percent of all premature deaths and disabilities in the U.S. are caused by six chronic diseases and smoking. Michigan has the highest chronic disease death rate in the Nation.

How do you propose to address this need in FY 91?

Dr. Roper: CDC has the institutional skills, as well as expertise and experience supporting chronic disease control programs in State and local health departments, to translate scientific and programmatic knowledge into coordinated public health programs capable of reaching large numbers of people. Community cardiovascular disease interventions, screening programs for early detection for breast and cervical cancers, comprehensive school health curricula, and diabetes control projects have all demonstrated the potential to significantly reduce the impact of chronic diseases. Recent studies indicate that nearly one-third of cancer deaths, almost one-half of deaths due to cardiovascular disease, and over one-third of the debilitating complications of diabetes can be prevented through the widespread application of currently available but as yet largely unapplied knowledge.

CDC will continue to provide consultation and technical assistance to the Michigan Department of Public Health, just as we do for other State health departments with similar concerns.

Mr. Pursell: Your testimony discusses community-based efforts to lower the risk of chronic diseases. After the program is completed, do the individuals maintain the new lifestyles, or do they revert back to their previous habits?

Dr. Roper: The programs described are in their initial planning and implementation phases, so it is not possible to describe long term changes of intervention populations. However, we do know that when properly developed and implemented, these type of programs result in long term changes in the health habits of the intervention population.

Effectiveness of chronic disease prevention and control programs depend on five critical components: careful planning of health programs and the intervention strategies offered by these programs; targeting modifiable risk factors, i.e., utilizing resources to accelerate the use of intervention methods and materials that have proven effectiveness and efficacy; addressing these health problems with an array of intervention methods that include health education techniques, policy and regulatory approaches, and environmental measures; encouraging community participation and involvement in the development and delivery of these programs; and program delivery by qualified, well-trained staff.

Many individuals do maintain their new lifestyles. Others revert only to be successful on a later attempt of opportunities to change remain available.

FIREARM INJURIES

Mr. Pursell: Firearm injuries are a major problem in the U.S. These injuries rank third in the economic toll of injuries, costing an estimated $1 billion in medical and other costs to society in 1984. This number is undoubtedly much higher today, what with the escalation of the drug trade. Firearms are the second-leading cause of fatal injury in the U.S.

Gunshot wounds have increased 300 percent among those under age 17 in urban areas since 1986, and one in every 10 people under age 19 who died in 1987 was killed by a firearm.

Do you agree that this is becoming a more serious problem every day?

Dr. Roper: Yes, I agree that this is a very serious problem and is becoming worse every day, particularly, for some segments of our population. For example, since 1984, the firearm death rate for black males 20 to 24 years of age in the U.S. has increased by 39 percent. The overall economic impact of firearm injuries is much greater than the $1 billion dollars you have quoted. Our most recent estimate indicates that firearm injuries imposed a 14.4 billion dollar economic burden on the U.S. in 1985.

Mr. Pursell: What is CDC doing to address this problem?

Dr. Roper: CDC is working to promote and establish a more complete scientific understanding of the role of firearms in homicide, suicide, and unintentional injury. Major advances in the prevention of public health problems such as motor vehicle injuries have been achieved through the application of sound scientific principles and we believe that only by applying such principles will we be able to develop the information base necessary to identify effective strategies for the prevention of firearm injuries. Findings from research on firearm injuries need to be disseminated so that citizens, policy-makers, and others can make informed judgments on how to prevent firearm injuries. This must be done in such a way as to allow flexibility for States and localities to define which mix of outcomes and strategies will best achieve the goal of preventing firearm injuries, given their particular resources and political environment. There are three major scientific priorities that we must address to establish a solid foundation for the prevention of firearm injuries:

- The magnitude and distribution of firearm-related morbidity, disability, and behavioral risk factors should be routinely monitored through public health surveillance systems.

- High priority should be given to epidemiologic investigations that focus on quantifying the risks for injury associated with firearm possession or lack thereof in individuals.

- Regulations and other interventions that potentially affect the risk of firearm injury must be rigorously evaluated.

Mr. Pursell: Are there gaps in your collection of statistics of nonfatal injuries by firearms?

Dr. Roper: Yes, currently little is known about the magnitude and distribution of firearm-related morbidity and disability. Information should be collected on:

- The number and rate of nonfatal firearm injuries and disabilities seen in emergency rooms.

- The nature and severity of nonfatal firearm injuries and disabilities.

- The cost of nonfatal firearm injuries and disabilities.

- The cause of nonfatal firearm injuries and disabilities (i.e., suicidal behavior, interpersonal violence, or unintentional discharge of a weapon).

Mr. Pursell: Would the collection of data on nonfatal, firearm injuries be beneficial in the development and implementation of a prevention strategy?

Dr. Roper: Yes, the availability of this kind of information would help to more accurately establish the priority that should be given to the health consequences of firearm injuries by providing more complete and accurate measurement of the incidence, prevalence, and costs of firearm injury. In addition, these data would provide information essential for targeting and evaluating the effectiveness of prevention programs.

Mr. Pursell: How could this be conducted and what would it cost annually?

Dr. Roper: This information can be obtained by expanding existing emergency department based injury surveillance systems. These are systems which collect basic information on injuries treated in emergency departments on a routine basis. The expansion of existing emergency department-based surveillance systems to collect basic information on firearm injury from emergency room records would cost approximately 300,000 dollars per year. Expanding this effort to the use of other hospital records, EMS reports, and police reports to collect more detailed information on the disabilities, costs, and causes of firearm injuries would require approximately 700,000 dollars per year. However, CDC is not requesting additional funds for this purpose within the priorities of the 1991 budget.

Mr. Pursell: Would it be feasible to collect this information in hospital emergency rooms, consisting of the number and rate of nonfatal firearm injuries, the severity of the injury, and the cause of the injury?

Dr. Roper: Yes, we believe hospital emergency departments would be the ideal location to collect this sort of information and our initial research suggests that it would be feasible to do so in this setting.

JUSTIFICATION OF THE BUDGET ESTIMATES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

CENTERS FOR DISEASE CONTROL

Disease Control, Research, and Training

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CENTERS FOR DISEASE CONTROL

Disease Control, Research, and Training

To carry out Titles III, XVII, XIX, and section 1102 of the Public Health Service Act, sections 101, 102, 103, 201, 202, and 203 of the Federal Mine Safety and Health Act of 1977, and sections 20, 21, and 22 of the Occupational Safety and Health Act of 1970; including insurance of official motor vehicles in foreign countries; and hire, maintenance, and operation of aircraft, [$1,101,559,000], *$1,171,755,000*, of which [$2,000,000] *$7,900,000*, shall remain available until expended for equipment and construction and renovation of facilities: *Provided*, That training [of private persons] Δ shall be made subject to reimbursement or advances to this appropriation for not in excess of the full cost of such training: *Provided further*, That funds appropriated under this heading shall be available for payment of the costs of medical care, related expenses, and burial expenses hereafter incurred by or on behalf of any person who had participated in the study of untreated syphilis initiated in Tuskegee, Alabama, in 1932, in such amounts and subject to such terms and conditions as prescribed by the Secretary of Health and Human Services and for payment, in such amounts and subject to such terms and conditions, of such costs and expenses hereafter incurred by or on behalf of such person's wife or offspring determined by the Secretary to have suffered injury or disease from syphilis contracted from such person: *Provided further*, That collections from user fees may be credited to this appropriation: *Provided further*, That amounts received by the National Center for Health Statistics from reimbursable and interagency agreements and the sale of data tapes may be credited to this appropriation and shall remain available until expended: *Provided further*, That in addition to amounts provided herein, up to $19,000,000 shall be available from amounts available under section [2613] *2611* [2] of the Public Health Service Act, to carry out the National Center for Health Statistics surveys: [*Provided further*, That employees of the Public Health Service, both civilian and Commissioned Officer, detailed to States or municipalities as assignees under authority of section 214 of the Public Health Service Act in the instance where in excess of 50 percent of salaries and benefits of the assignee is paid directly or indirectly by the State or municipality, and employees of the National Center for Health Statistics, who are assisting other Federal organizations on data collection and analysis and whose salaries are fully reimbursed by the organizations requesting the services, shall be treated as non-Federal employees for reporting purposes only; and in addition, for high priority construction projects of the Centers for Disease Control, $5,000,000]. [3]

/1 Language has been deleted to agree with the FY 1990 President's Budget request. Provides specific authorization for depositing funds to this appropriation which are collected for training up to the cost of the training provided. Returns language to the less restrictive form used in the FY 1988 appropriation.

/2 Public Health Service Act citation has been corrected.

/3 Language on reporting of state assignee employees has been deleted. The establishment of staffing ceilings is an administrative management tool and need not be determined through appropriation law. In FY 1991 all requested staff will continue to be assigned to States, in lieu of grant funds, for assistance in managing sexually transmitted diseases, immunization, and other general prevention programs.

Preventive Health Services

Language Analysis

Language Provision	Explanation
"...including insurance of official motor vehicles in foreign countries......."	No specific authorization exists for the provision regarding insurance; however, experience of the Centers for Disease Control in stationing Public Health Service officials overseas and at the Mexican Border indicates that this provision is essential. Unless adequate automobile insurance is provided, Public Health Service officials could be subject to arbitrary arrest if they were involved in an accident.
"...and hire, maintenance, and operation of aircraft................"	The Centers for Disease Control must maintain the ability to hire aircraft for testing of new insecticides and formulations and for applying the insecticides when outbreaks of mosquito-borne disease, such as encephalitis, occur in populous areas where no other method can be used to control the spread of the disease.
"...of which $7,900,000 shall remain available until expended and shall be for construction and renovation of facilities.............."	Repair and construction projects require lead time for planning, designing, and contracting procedures, which require longer than the fiscal year to complete and obligate funds.
"...That training of [private persons] shall be made subject to reimbursement or advances to this appropriation for not in excess of the full cost of such training..."	Provides specific authorization for depositing funds to this appropriation which are collected for training up to the cost of the training provided.

Language Provision	Explanation
"...that funds appropriated under this heading shall be available for payment of the costs of medical care, related expenses, and burial expenses hereafter incurred by or on behalf of any person who had participated in the study of untreated syphilis initiated in Tuskegee, Alabama, in 1932, in such amounts and subject to such terms and conditions as prescribed by the Secretary of Health and Human Services and for payment, in such amounts and subject to such terms and conditions, of such costs and expenses hereafter incurred by or on behalf of such person's wife or offspring determined by the Secretary to have suffered injury or disease from syphilis contracted from such person..."	Provides specific authorization for payment of cost of medical care, related expenses, and burial expenses for participants in the study of untreated syphilis. It also provides for payment of cost and expenses incurred by or on behalf of the participant's spouse or offspring who have suffered injury or disease from syphilis contracted from such participants.
"...that collections from user fees may be credited to this appropriation..........."	Provides specific authorization to allow all funds collected as user fees to be deposited to this appropriation.
"...that amounts received by the National Center,for Health Statistics from reimbursable and interagency agreements and the sale of data tapes may be credited to this appropriation and shall remain available until expended:........."	Provides specific authorization to allow all funds collected by the National Center for Health Statistics from reimbursable and interagency agreements to be deposited to this appropriation and to remain available until expended.

Language Provision	Explanation
"...that in addition to amounts provided herein, up to $19,000,000 shall be available from amounts available under section 213 of the Public Health Service Act, to carry out the National Center for Health Statistics surveys......"	Provides specific authorization for use of evaluation funds by the National Center for Health Statistics to help finance health surveys.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DISEASE CONTROL, RESEARCH, AND TRAINING
CENTERS FOR DISEASE CONTROL
Amounts Available for Obligation /1

	1989 Actual	1990 Appropriation	1991 Estimate
Appropriation:			
Annual....................	$999,830,000	$1,106,559,000	$1,171,755,000
Less 1.2% reduction (P.L. 100-436).........	-11,925,000	-----	-----
Less salaries and expenses reduction (P.L. 101-166)	-----	-1,553,000	-----
Sequester..................	-----	-14,217,000	------
Total, effective appropriation........	987,905,000	1,090,789,000	1,171,755,000
Real transfer to:			
Health Resources and Services for: HIV/AZT program........	-4,684,000	------	------
Comparative transfer to:			
Office of Assistant Secretary for Health - National Vaccine Program.................	-494,000	-----	-----
Subtotal, adjusted budget authority.................	976,727,000	1,090,789,000	1,171,755,000
Unobligated balance, start of year............	13,398,000	4,537,000	-----
Unobligated balance, end of year..............	-4,537,000	-----	-----
Unobligated balance lapsing..	-63,000		-----
Total obligations.........	985,525,000	1,095,326,000	1,171,755,000

/1 Excludes the following amounts for reimbursable activities carried out by this account: 1989 - $73,104,000 and 401 FTE; 1990 - $ 83,000,000 and 477 FTE; 1991 - $93,000,000 and 477 FTE.

Centers for Disease Control
Disease Control, Research, and Training

Summary of Changes

1990 Appropriation..........................	$1,090,789,000
1991 Request................................	1,171,755,000
Net Change..................................	+$80,966,000

	1990 Current Estimate Base Pos. (FTE)	 Budget Authority	Change from Base Pos. (FTE)	 Budget Authority
Increases:				
A. Built-in:				
1. Pay Raises effective Jan, 1991	---	---	---	$ +6,486,000
2. Annualization of pay raises effective Jan., 1990	---	---	---	+2,227,000
3. One extra day of pay..........	---	---	---	+560,000
4. Annualization of positions new in 1990.................	---	---	---	+847,000
5. Within grade increases........	---	---	---	+1,963,000
6. Medicare and FICA increases...	---	---	---	+313,000
7. Office of Federal Employees Compensation and Federal Employees health benefits Retirement (FERS)..........	---	---	---	+380,000
8. Rental payments to GSA, car rental, telecommunication, and postage	---	---	---	+416,000
9. Utilities and fuel increase cost	---	---	---	+120,000
10. Computer center increase.....	---	---	---	+1,478,000
11. PHS service and supply fund..	---	---	---	+376,000
12. HHS Working Capital Fund	---	---	---	+17,000
13. Cost of contracts............	---	---	---	+10,390,000
14. Vaccine cost.................	---	---	---	+1,315,000
Subtotal.....................	---	---	---	+26,888,000
B. Program:				
1. Immunization Grants - State Operations...........	---	19,186,000	---	+545,000
2. Epidemic Services - Infant Health..............	---	---	+25	+11,500,000
3. Human Immunodeficiency Virus	768	442,826,000	+80	+55,299,000
4. Buildings and facilities-repairs and improvements...	---	6,910,000	---	+5,926,000
Subtotal.....................			+105	+73,270,000
Total increases..............			+105	+100,158,000

	1990 Current Estimate Base		Change from Base	
	Pos. (FTE)	Budget Authority	Pos. (FTE)	Budget Authority
Decreases				
A. Built-in				
1. Immunization- Grants - Parent/Patient Notification..............	---	4,078,000	---	-1,078,000
2. Chronic and Environmental Disease Prevention - Non-recurring cost of Hanford Study.............		600,000	---	-192,000
3. Occupational Safety and Health Research-Surgeon General's Conference................		123,000	---	-123,000
4. Non-recurring high-priority construction...............	---	6,910,000	---	-4,936,000
Subtotal.....................			---	-6,329,000
B. Program:				
1. Immunization: Vaccine Stockpile..........	---	2,961,000	---	-2,961,000
2. Scientific equipment.........	---	---	---	-6,659,000
Preventive Health Block Grants	---	---	---	-13,000
Sexually transmitted diseases	---	---	---	-382,000
Immunization	---	---	---	-294,000
Infectious diseases	---	---	---	-1,395,000
Occupational Safety and Health	---	---	---	-1,884,000
Epidemic Services	---	---	---	-1,916,000
Health Statistics	---	---	---	-661,000
Program Management	---	---	---	-114,000
3. Absorption of 1/2 of pay raises effective January, 1991.....	---	---	---	-3,243,000
Subtotal......................			---	-12,863,000
Total Decreases..............			---	-19,192,000
Net Change..................			---	+$80,966,000

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL
Disease Control, Research, and Training
(Dollars in Thousands)
Budget Authority by Activity

	1989 Actual FTE	1989 Actual Amount	1990 Appropriation FTE	1990 Appropriation Amount	1990 Current Estimate FTE	1990 Current Estimate Amount	1991 Estimate FTE	1991 Estimate Amount
Preventive Health & Health Services Block Grants:								
Grants......................	0	$84,259	---	$83,176	---	$83,176	---	$83,176
Program operations..........	6	445	8	937	8	937	8	943
Subtotal..................	6	84,704	8	84,113	8	84,113	8	84,119
Prevention Centers...........	0	1,976	---	3,949	---	3,949	---	3,949
Sexually Transmitted Diseases:								
Grants......................	0	68,172	---	70,666	---	70,666	---	70,666
Program operations..........	170	10,528	164	10,640	164	10,640	164	10,754
Subtotal..................	170	78,700	164	81,306	164	81,306	164	81,420
Immunization:								
Grants......................	0	126,797	---	131,480	---	130,080 /1	---	130,862
Program operations..........	138	10,721	169	21,742	169	21,742	169	11,424
Vaccine stockpile...........	0	3,952	---	2,961	---	2,961	---	---
Subtotal..................	138	141,470	169	156,183	169	154,783	169	152,722
Infectious Diseases /1........	604	48,077	530	48,086	530	48,086	530	48,955
Chronic and Environmental Disease Prevention...........	528	65,681	628	77,163	628	77,163	628	78,973
Occupational Safety and Health:								
Research....................	792	60,260	853	74,204	853	74,204	853	74,675
Training....................	0	10,095	---	10,461	---	10,461	---	10,461
Subtotal..................	792	70,355	853	84,665	853	84,665	853	85,136
Epidemic Services.............	952	54,787	876	55,388	876	55,388	901	68,180

	1989 Actual		1990 Appropriation		1990 Current Estimate		1991 Estimate	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
Health Statistics............								
Program operations..........	---	45,186	431	43,871	431	45,271 /1	431	44,884
Program support............	---	3,165	54	3,206	54	3,206	54	3,244
Subtotal..................	495	48,351	485	47,077	485	48,477		
Human Immunodeficiency Virus..	555	377,592	768	442,826	768	442,826	848	509,103
Buildings & Facilities........	0	1,976	---	6,910	---	6,910	---	7,900
Program Management............	68	3,058	68	3,123	68	3,123	68	3,170
Total Budget Authority......		976,727	4,549	1,090,789	4,549	1,090,789	4,654	1,171,755
Reimbursable FTE..............	402		478 /2		478 /2		478 /2	
Total........................	4,710		5,027		5,027		5,132	

/1 Reflects proposed reprogramming of $1.9 million from current/patient notification to: Immunization Grants and $1.4 million to NCHS.

/2 Includes 250 FTE for the Agency for Toxic Substances and Disease Registry in FY 1990 and FY 1991 and 168 in FY 1989.

Budget Authority by Object

	1990 Estimate	1991 Estimate	Increase or Decrease
Total number of full-time permanent posititons...............	4,797	4,894	+97
Full-time equivalent of all other positions..........................	450	460	+10
Total compensation work years........	5,189	5,294	+105
Average ES salary....................	$77,790	$94,309	+$16,519
Average GS Grade	10.22	10.23	+.01
Average GS Salary....................	$36,585	$37,801	+$1,216
Average grade, grades established by Act of July 1, 1944 (42 U.S.C. 207).	4.7	4.7	---
Average salary, grades established by Act of July 1, 1944 (42 U.S.C. 207).	$39,615	$40,978	+$1,363
Average salary of ungraded positions.	$24,006	$24,846	+$840

NOTE: Excludes reimbursable

Personnel compensation:			
Permanent positions.............	$169,631,000	$174,741,00	+5,110
Positions other than permanent...	15,063,000	15,707,000	+644
Other personnel compensation.....	3,726,000	4,032,000	+306
Subtotal, personnel compensation.	188,420,000	194,480,000	+6,060
Personnel benefits.................	33,692,000	34,580,000	+888
Travel and transportation of persons.........................	11,327,000	12,195,000	+868
Transportation of things...........	2,211,000	2,211,000	---
Rent, communications and utilities.	12,744,000	13,849,000	+1,105

Rental payments to GSA.............	7,957,000	8,454,000	+497
Printing and reproduction..........	5,395,000	6,112,000	+717,000
Other services.....................	99,967,000	109,788,000	+9,821,000
Project contracts..................	63,349,000	67,502,000	+4,153,000
Supplies and materials.............	106,893,000	104,819,000	-2,074,000
Equipment..........................	22,889,000	11,832,000	+11,057,000
Lands and structures...............	5,854,000	5,854,000	---
Grants, subsidies and contributions.....................	530,091,000	600,079,000	+69,988,000
Total budget authority by object	$1,090,789,000	$1,171,755,000	+80,966,000

Significant Items in House and Senate
Appropriation Committee Reports

Item

1990 House Report #101-172

Preventive Health Block Grant	Action Taken or to be Taken
1. The Committee notes ongoing concerns about the collection and reporting of data regarding the preventive health and health services block grant program and supports CDC's efforts during this year to launch a pilot program in ten States which demonstrates improved reporting. This will allow the CDC to more closely monitor the use of federal funds by the States as well as to review programs and their impact on the various States as to numbers of people reached, types of services provided and the impact on improving health in the population. The Committee urges CDC to expand this pilot program to all States during 1990 and has provided $2,000,000 for that purpose. This matter was addressed last year in P.L. 100-607.	1. Final 1990 appropriation action allowed an additional $489,000 for data reporting by the States for the Preventive Health Block Grant. Funds will be provided to an additional 10 States (20 total) that have the capability to develop program monitoring and reporting systems that can be replicated in other States and that are consistent with the reporting systems called for in the draft Year 2000 Objectives. During 1989, Block Grant recipients in 20 States were provided with individual workshops to address reporting requirements of the legislation and to develop program-specific mechanisms for future reporting. Also during 1989, common data elements for model program criteria were established for 10 separate program areas. In 1990, more States will be provided with workshops, model program criteria will be established for additional programs, a system for receiving and aggregating annual reports will be established, and reporting for local program services will be initiated in selected States.

Item	Action Taken or to be Taken
1990 House Report #101-172	
Tuberculosis	
2. The Committee expects that CDC will utilize the various mechanisms available to implement this program and encourage the initiation of the strategic plan. While the Committee has provided additional distinct funding for TB control, the CDC is expected to also utilize other resources to implement the TB elimination plan.	2. Tuberculosis cooperative agreements have been awarded to 46 State and local health departments to target high risk groups, especially racial and ethnic minority populations. These cooperative agreements are also being used to begin implementation of the TB elimination plan. Supported activities include development of a National Training Initiative to meet professional education needs (Steps 1 and 3 of the Plan); funding of research to study patient compliance (Step 1 of the Plan); and initiation of studies of alternative treatment and preventive treatment drugs (Step 2 of the Plan). Collaboration with many professional societies, including the American Medical Association, National Medical Association, the American Thoracic Society, and others has resulted in a proposal to develop tuberculosis educational materials, specific for provider specialities (Steps 1 and 3 of the Plan). Fourteen States have already established their own tuberculosis elimination advisory committees to implement activities and help identify resources. CDC will continue to apply other resources to prevention and control program operations and grants. All of the funding for tuberculosis directly supports implementation of the TB elimination plan.

Item	Action Taken or to be Taken
1990 House Report #101-172	
Chronic Diseases	
3. CDC's newly established Center for Chronic Disease Prevention and Health Promotion assists the States to implement a program to prevent and control chronic diseases, with special attention given to minority and medically underserved populations. The Committee urges CDC to increase funding so that it may expand this program to additional States.	3. CDC agrees that the control of chronic diseases is a high priority and for the past several years has steadily provided increased resources in this area. The newly established Center for Chronic Disease Prevention and Health Promotion will continue to expand programs to additional States as resources permit.
Urinary Incontinence	
4. The Committee urges CDC to undertake a pilot project to assess public health issues related to urinary incontinence. The Committee has included funds for this purpose.	4. CDC has undertaken the development of a pilot project to assess the public issues related to urinary incontinence. This project is currently in the early stages of design and implementation with an analysis of existing data sets and a report to follow.
Chronic Fatigue Syndrome	
5. The Committee commends the CDC for its work on Chronic Fatigue Syndrome and its commitment to continuing these efforts in 1990. The Committee urges the CDC to expand its CFS surveillance activities and to conduct further research including case studies of patients and investigation of suspected clusters of CFS. The Committee requests that the CDC undertake efforts to train physicians and health workers about CFS and to provide information to the general public in order to increase the general understanding of this syndrome.	5. A detailed protocol for the development of a prototype CFS surveillance system has been completed. Two hundred physicians have been recruited to serve as sentinel surveillance sites. Two major CDC publications have addressed a review of CFS and management of patients with suspected CFS. Additionally, the Center for Infectious Diseases participated in the first national CFS conference. CID continues to provide laboratory support for various CFS

Item	Action Taken or to be Taken
1990 House Report #101-172 Chronic Fatigue Syndrome (Cont'd)	projects located throughout the U.S. Future plans for 1991 include efforts to implement a full surveillance system in four sites, continue to evaluate and develop methodologies to detect neuropsychological abnormalities, integrate a case-control component into surveillance system, further support serologic testing, investigate suspected clusters and develop information to assist the public.
Farm Safety and Health 6. The Committee recognizes the fact that farm and agricultural-related injuries, disease and fatalities are higher than in other occupations....To address that need, the Committee has set aside $500,000 for NIOSH to expand programs on agricultural health and safety, including surveillance, training and educational programs....The Committee intends that NIOSH use these funds for special project grants in agriculture health and safety programs designed to directly benefit farmers and farm workers. NIOSH is urged to coordinate its agriculture health and safety programs with the U.S.D.A. Cooperative Extension Service in expanding such activities to reduce farm-related injuries and fatalities.	6. CDC, in collaboration with the Department of Agriculture and the Association of Schools of Public Health, will establish agricultural injury and disease prevention programs at fifteen land grant universities. The land grant universities will collaborate with the county extension officers of the cooperative extension program to disseminate information and conduct programs to prevent injury and illness among agricultural workers and their families. The universities will implement programs developed by federal and State agencies, or the proposed centers for agricultural safety and health, to educate agricultural workers in safety and health. These programs will be established in the area of occupational health promotion and pesticide safety; assist in the evaluation and

Item	Action Taken or to be Taken
1990 House Report #101-172 Farm Safety and Health (Cont'd)	collection of surveillance data on agricultural injuries and injury hazards, the reporting of certain occupational illnesses, and the investigation of work-related fatalities or diseases in agricultural operations; collaborate with the NIOSH Agricultural Research Centers in the areas of extension program development, technology transfer, and research priority setting and evaluation; and initiate the incorporation of safety and health information into college level courses within the college of agriculture and agricultural engineering programs at the universities.
Vital Statistics	
7. The Committee expects the National Center for Health Statistics to continue funding all components of the current vital statistics cooperative program, including marriage and divorce statistics and linked file data.	7. In FY 1990, as expected by the Committee, NCHS will fully fund all components of the vital statistics system including birth, death, marriage and divorce, and the program to link birth and infant records. This level of activity is provided for in the FY 1991 request.

Item	Action Taken or to be Taken
1990 House Report #101-172 Human Immunodeficiency Virus (HIV)	
8. Although many minorities will be reached through other program efforts, the Committee thinks it is important to continue to maintain a special minority emphasis because of the extent to which minority populations are disproportionately affected by the AIDS epidemic. Working with national organizations, CDC is attempting to bring national minority leadership to efforts to promote and assist AIDS prevention activities at the community level, to complement the assistance provided to local minority organizations through State and local agencies. The Committee is pleased with the CDC decision to target minority community-based and national groups in its efforts to contain the spread of the AIDS virus.	8. CDC's funding of Community Based Organizations (CBOs) began as an effort to reach underserved populations in areas of highest incidence. In fiscal year 1989, CDC assisted CBOs involved in HIV prevention activities through four different funding mechanisms. Each of these mechanisms was aimed specifically at providing resources to CBOs representing underserved populations, high per capita incidence, or geographic diversity. (1) Since fiscal year 1987, the HIV/AIDS Prevention and Surveillance Cooperative Agreements have required State and local health departments to provide funds and technical assistance to CBOs representing racial/ethnic minority populations and to assist them in conducting knowledge, attitude, beliefs, and behaviors (KABB) surveys to determine the areas of greatest need within their communities for HIV prevention programming. More than 345 organizations have received support through this mechanism. In order to ensure a cohesive and comprehensive HIV prevention program which attempts to reach all at-risk populations, health departments are required to collaborate and coordinate their HIV prevention plans with those of minority communities, AIDS service organizations, and

Item	Action Taken or to be Taken
1990 House Report #101-172 Human Immunodeficiency Virus (HIV) (Cont'd)	organizations that serve persons at increased risk of HIV infection and AIDS, e.g., drug-use treatment facilities, STD clinics, family planning agencies, etc. These same requirements are part of the 1990 HIV/AIDS Prevention and Surveillance Cooperative Agreements. (2) In fiscal year 1989, CDC awarded $9.7 million to 64 minority and other CBOs in the 27 metropolitan areas with highest incidence of AIDS. Funds and technical assistance were awarded to 30 CBOs which represent and serve minority populations and 34 CBOs that serve populations at high risk of infection without regard to their ethnic status. This program will be expanded in fiscal year 1990 to $ 19.1 million. (3) Since 1985, the United States Conference of Mayors (USCM), through a cooperative agreement with the CDC, has awarded more than $3.3 million to 108 CBOs to undertake HIV prevention and education programs. Priority has been given to organizations that have established ties with minority communities who are at risk. In 1989, more than 50 percent of the grants were made to CBOs in areas which had not previously been funded.

Item	Action Taken or to be Taken
1990 House Report #101-172	
Human Immunodeficiency Virus (HIV) (Cont'd)	
	(4) In addition, the CDC's National and Regional Grant Program for minority organizations has awarded 32 grants to national and regional organizations to promote awareness of the impact of HIV and AIDS on minority populations and to provide technical assistance to their network of local affiliates.
9. The Committee expects CDC to continue to maintain close coordination with the Office of Minority Health in carrying out the AIDS program.	9. CDC has developed close communication ties with the Office of Minority Health (OMH), both through the effort of the Assistant Director for Minority Health (CDC) as well as the Special Assistant for Minority HIV Policy Coordination (CDC). These ties have been integral to the maintenance of close coordination between OMH and CDC relative to AIDS/HIV programs, and will continue to prove instrumental in future collaborations.
10. The Committee fully agrees with the need for CDC, working closely with both the national hemophilia organization and State and local health departments, to develop and implement appropriate mechanisms and protections for testing/counseling in the hemophilia community. CDC should report to the Committee at next year's budget hearings on implementation steps for utilizing the national hemophilia treatment network.	10. CDC is currently preparing a report to the House Appropriations Committee, which is expected to be completed prior to the FY 1991 budget hearings.

Item	Action Taken or to be Taken
1990 House Report #101-172	
Human Immunodeficiency Virus (HIV) (Cont'd)	
11. Separate funding must be provided to any local health department which serves the largest potential jurisdiction in a MSA, when such MSA reported more than 2,000 AIDS cases as of June 30, 1989 and such cases represent at least 75 percent of the AIDS cases reported in that State.	11. When President Bush signed the Fiscal year 1990 appropriations bill for HHS, the Cities of Philadelphia and Chicago became eligible for direct funding through the Human Immunodeficiency Virus Prevention and Surveillance Cooperative Agreements. CDC received and reviewed applications from both these cities, and the respective budgets were negotiated for funding awards that began on January 1, 1990.

Item	Action Taken or to be Taken
1990 Senate Report #101-127	
Preventive Health and Health Services Block Grant	
1. The Committee directs that the prevention centers, TB grants, and diabetes State grants, be placed in their appropriate fiscal year 1989 budget activity lines. Injury control activities should be identified in a separate budget activity line in fiscal year 1990 to correspond to the importance placed by this Committee on the injury activities carried out by CDC.	1. The prevention centers, TB grants, and the diabetes State grants have been placed in their corresponding FY 1989 budget activity line items for FY 1990. Injury control activities remain under the Chronic and Environmental Disease Prevention budget line item, but have been separately identified and its resources discussed in the narrative for this line item in this document.
Lead Poisoning Prevention	
2. The Committee believes that areas of greatest need such as communities in New Jersey and Pennsylvania should be the recipients of lead screening, referral, and outreach grants funded through the CDC Program. The Committee directs the CDC to provide no less than $500,000 for the State of New Jersey. The Committee urges the CDC to strongly consider providing funds to the New Jersey Office for the Prevention of Mental Retardation and Developmental Disabilities for a demonstration project to broaden its program and expand it to cover all counties in the State of New Jersey. The Committee urges the CDC to give special consideration to grant applications from areas with more than 50 percent of children living in pre-1950 housing.	2. CDC will provide grant support under the authorization of the Lead Contamination Control Act of 1988 for lead screening, referral, and outreach program activities. Special consideration in the competitive grant process will be given to States such as Pennsylvania and New Jersey with the most significant childhood lead poisoning problem and the greatest need. Pursuant to the direction of the Committee, the State of New Jersey which has demonstrated significant childhood lead poisoning problems will be encouraged to submit a grant proposal that meets the evaluation criteria for awarding of a grant. The grant award is intended to develop, expand, and improve prevention efforts in those States and communities selected. The grant awards will be used to employed to encourage the development of outreach programs as a supplement to other childhood lead poisoning prevention program activities.

Item	Action Taken or to be Taken
1990 Senate Report #101-127	
Sexually Transmitted Diseases (STD)	
3. The Committee is concerned that adequate funds and resources be made available to provide training for clinicians and experienced disease intervention personnel. The Committee encourages the program to establish demonstration projects to evaluate innovative means of preventing and controlling all STD's, including AIDS.	3. The STD Prevention/Training (P/T) Center Program was initiated in FY 1979 to address the growing need to improve STD diagnostic and treatment skills among the nation's public and private clinicians. In FY 1989, aspects of HIV prevention training were added to the training offered by the P/T centers. The 11 centers play a role in providing information and practice in pace with changing disease trends and therapies. Seventy-eight courses were taught to 964 disease intervention personnel in FY 1989. These courses included introductory, supervisory, and management courses. CDC maintains a high commitment to the training of clinicians and experienced disease intervention personnel, and will continue to do so during FY 1990. CDC is supporting two demonstration projects which are geared to changing high-risk sexual behavior designed to prevent both STD and HIV infection. The AIDS Community Demonstration Projects are flexible Community Based Research Centers in seven locations across the country for the development, implementation, and evaluation of interventions to prevent further transmission of HIV in a community. The reduction of high-risk sexual behaviors to prevent HIV infections will also reduce the spread of

Item	Action Taken or to be Taken
1990 Senate Report #101-127 **Sexually Transmitted Diseases (STD)** (Cont'd)	sexually transmitted diseases as is evidenced by the precipitous drop of syphilis in white males since 1984. Efforts have not been as successful with inner-city low income minority populations. For this reason, the approach of the demonstration projects was changed in 1989 to focus on hard-to-reach populations such as intravenous drug users (IVDU) not in treatment, sex partners of IVDU, male and female prostitutes, and street youth. The demonstration projects examine social and epidemiologic factors related to HIV transmission among individuals at risk of acquiring or transmitting STD or HIV infection, as well as the groups with which they interact.
4. The Committee notes that STD clinics are currently overburdened and persons seeking assistance at these clinics face inordinately long waiting times. The Committee is concerned that increasing demand for resources, laboratory time, personnel, and clinic time for HIV testing not divert resources available for STD services.	4. The increasing incorporation of HIV prevention activities, including HIV counseling and testing, into STD control programs is NOT diverting Federal STD control resources away from STD clinical services. However, patient diagnosis and treatment activities are the responsibility of State and local health departments.

Item	Action Taken or to be Taken
1990 Senate Report #101-127	
Tuberculosis	
5. Recently the Centers for Disease Control announced the release of the strategic plan for the elimination of tuberculosis in the United States that was endorsed by the Secretary of Health and Human Services in April. The Committee expects that CDC will utilize the various initiations of the strategic plan. While the Committee has provided additional distinct funding for tuberculosis control, the CDC is expected to also utilize some existing discretionary funds to implement the tuberculosis elimination plan.	5. Tuberculosis cooperative agreements have been awarded to 46 State and local health departments to target high risk groups, especially racial and ethnic minority populations. These cooperative agreements are also being used to begin implementation of the TB elimination plan. Supported activities include development of a National Training Initiative to meet professional education needs (Steps 1 and 3 of the Plan); funding of research to study patient compliance (Step 1 of the Plan); and initiation of studies of alternative treatment and preventive treatment drugs (Step 2 of the Plan). Collaboration with many professional societies, including the American Medical Association, National Medical Association, the American Thoracic Society, and others has resulted in a proposal to develop tuberculosis educational materials, specific for provider specialities (Steps 1 and 3 of the Plan). Fourteen States have already established their own tuberculosis elimination advisory committees to implement activities and help identify resources. CDC will continue to apply other resources to prevention and control/program operations and grants. All of the funding for tuberculosis directly supports implementation of the TB elimination plan.

Item	Action Taken or to be Taken
1990 Senate Report #101-127	
Breast and Cervical Cancer	
6. The Committee is concerned about the number of women suffering from breast and cervical cancer each year. Even though the scientific community has performed the basic research on these diseases and has developed the necessary tools for their prevention, it is estimated that more than 500,000 women will die needlessly from breast and cervical cancer during the next decade . . . . The Committee recommends $6,000,000 and 15 FTE's to provide a focus at the national level and initiate State-based programs that will prevent needless deaths from breast and cervical cancer in women.	6. Final 1990 appropriations action provided $4,926,000 for breast and cervical cancer screening programs. Working with other Federal agencies (HRSA, FDA, and NIH) and private and voluntary health organizations, CDC will provide support to selected State health agencies for planning and implementing comprehensive prevention and control programs for women at risk of breast and cervical cancer. Technical and financial assistance to these States will assure that: 1) effective screening and follow-up services are available and accessible; 2) state-of-the-art public education and provider education programs are implemented; and 3) surveillance and evaluation systems and programs are in place to enable the effective tracking of cancer incidence and trends and to assure the highest possible quality of the screening tests.

Item	Action Taken or to be Taken
1990 Senate Report #101-127	
Chronic Fatigue Syndrome	
7. The Committee commends the CDC for its activities related to studies of chronic fatigue syndrome and is pleased to note that the expanded surveillance network study is underway and that the CDC has proposed new research programs for study of this disease. These programs include developing methodologies, enrolling patients in case studies, and investigating suspected clusters of CFS to better delineate this illness clinically, virologically, and epidemiologically. The Committee recommends that the CDC undertake this research on CFS and accelerate the studies as data from the field surveillance becomes available. The funding includes 12 FTEs for CFS activities.	7. A detailed protocol for the development of a prototype CFS surveillance system has been completed. Two hundred physicians have been recruited to serve as sentinel surveillance sites. Two major CDC publications have addressed a review of CFS and management of patients with suspected CFS. Additionally, the Center for Infectious Diseases participated in the first national CFS conference. CID continues to provide laboratory support for various CFS projects located throughout the U.S. Future plans include efforts to implement a full surveillance system in four sites, continue to evaluate and develop methodologies to detect neuropsychological abnormalities, integrate a case-control component into surveillance system, further support serologic testing, investigate suspected clusters and develop information to assist the public.
Injury Control	
8. The Committee notes that the National Research Council in its 1988 report entitled "Injury Control" urged that the Centers for Disease Control establish appropriate training programs for injury control researchers and practitioners needed by injury control programs in State and local governments. The Committee...concurs with knowledgeable experts who urge that the number of research centers with training activities be expanded with three additional centers being funded in fiscal year 1990.	8. CDC will publish in the second quarter of fiscal year 1990 an announcement inviting universities and other eligible entities to submit new or revised grant proposals for Injury Control Research Centers (ICRC's) and injury control Research Program Project Grants (RPPG's). Both ICRG and RPPG grants provide valuable training opportunities, in that these grants allow support of research fellows. ICRC's differ from RPPG's in that the

Item	Action Taken or to be Taken
1990 Senate Report #101-127 Injury Control (Cont'd) The Committee directs the Centers for Disease Control to establish a research and training center for injury prevention. Based on the special expertise and need for such center in the upper Midwest, the Committee fully expects that such a center will be awarded to the University of Iowa. The increased funding for fiscal year 1990 includes $1,500,000 for the three new injury prevention and research training centers and $1,500,000 to expand the scope of the centers previously funded so that needed training can be accomplished.	latter grants are less comprehensive. Including both support mechanisms in the announcement is intended to encourage participation by universities who may not feel it appropriate or possible to establish comprehensive research centers (i.e. ICRC's). CDC recognizes the national need for ensuring that injury related research not be limited to a single geographic area of this diverse nation with a variety of injury related problems. Regional considerations are included among the factors to be weighed in the secondary review of grant applications approved on the basis of scientific and technical merit by the Injury Research Grants Review Committee. CDC will fund two to four grant proposals that respond to the ICRC/RPPG announcement. Staff have spoken to and visited with many of the researchers in the upper Midwest who have expressed an interest in injury control, including faculty from the University of Iowa. A number have expressed interest in submitting center or RPPG proposals. To the extent possible, investigators with complementary interests are being encouraged to work together in developing proposals. Already funded ICRC's have been asked to provide assistance to their colleagues, including scientific investigators from universities in the Midwest.

Item	Action Taken or to be Taken
1990 Senate Report #101-127	
Injury Control (Cont'd)	
	CDC recognizes the need for training programs for researchers and practitioners at the State and local level. When sufficient resources become available, CDC will place a high priority on expansion in this area.
Farm Safety and Health	
9. In order to actively promote and implement the research and intervention finding, the Committee directs the establishment of a national agricultural safety and health promotion system. To establish this system, CDC would, in collaboration with the Department of Agriculture and the Association of Schools of Public Health, establish agricultural injury and disease prevention promotion programs at each of the land grant universities.	9. CDC, in collaboration with the Department of Agriculture and the Association of School of Public Health, will establish agricultural injury and disease prevention programs at fifteen land grant universities. The land grant universities will collaborate with the county extension officers of the cooperative extension program to disseminate information and conduct programs to prevent injury and illness among agricultural workers and their families. The universities will implement programs developed by federal and State agencies, or the proposed centers for agricultural safety and health, to educate agricultural workers in safety and health. The schools of public health will assist in the review process in granting awards for FY90 and FY91 cooperative agreements.

Item	Action Taken or to be Taken
1990 Senate Report #101-127 Farm Safety and Health (Cont'd)	The cooperative agreements will be distributed on a regional basis with 3 universities selected on the Northeast, 4 universities selected in the South, 4 universities selected in the North Central States, and 4 universities selected in the West. Awards will be made based on the strength of existing land grant extension and educational services. Through these cooperative agreements, the land grant universities will increase extension activities in the area of occupational safety for agricultural workers; increase extension activities in the area of occupational health promotion and pesticide safety; assist in the evaluation and collection of surveillance data on agricultural injuries and injury hazards, the reporting of certain occupational illnesses, and the investigation of work-related fatalities or diseases in agricultural operations; collaborate with the NIOSH Agricultural Research Centers in the areas of extension program development, technology transfer, and research priority setting and evaluation; and initiate the incorporation of safety and health information into college level courses within the college of agriculture and agricultural engineering programs at the universities.

Item	Action Taken or to be Taken
1990 Senate Report #101-127	
Farm Safety and Health	
10. The Committee...directs the CDC to devise an early detection strategy to reduce the number of cancer deaths among farmers. The Committee notes that close cooperative efforts with existing rural hospital systems will be needed to identify and treat these cases. Accordingly, the Committee has included $2,100.00 to fund three demonstration projects to detect cancer occurring in farmers. These projects should be conducted in areas of the Upper Midwest where research has identified disproportionately high mortality rates for farmers due to five or more types of cancer. In addition, in order to screen the maximum number of farmers as quickly and cost effectively as possible, the projects should be conducted through existing nonprofit rural hospital networks which have onsite access to both the latest diagnostic equipment and board certified oncologists.	10. A program to reduce mortality from cancer with special emphasis on farm populations will be developed. The rationale for this program is that mortality from cancer can be reduced if currently available cancer control knowledge is effectively applied by groups at high risk of developing cancer or at high risk of not surviving from it. Effective cancer control consists of an integrated effort in prevention, early detection, and treatment. This program will consist of a three-pronged approach: (1) Three demonstration cancer control projects, (2) research studies to identify barriers to effective cancer control, and (3) a study of early markers of premalignant change or exposure to carcinogens. This program will be predominately extramural.
Comprehensive School Health Education	
11. The Committee urges CDC to provide sufficient funding for the establishment of a comprehensive approach to health education in the school setting. This should involve the establishment of model curricula, as well as teacher training activities. The Committee was concerned to learn that only 15 percent of our Nation's schools currently have comprehensive school health programs.	11. Through cooperative agreements with 20 national organizations and with 55 State and territorial and 16 local departments of education, CDC is helping State and local agencies to implement locally-determined HIV prevention programs within a program of comprehensive school health education. These agreements stress that comprehensive school health

Item	Action Taken or to be Taken
1990 Senate Report #101-127	
Comprehensive School Health Education (Cont'd)	education is needed to help school-aged youth make responsible decisions about their behaviors and lifestyles, especially those that might lead to HIV infection. In addition, most funded State and local departments of education will be conducting surveys that focus on youth risk behaviors to help identify and monitor factors that affect the health of our Nation's youth. To help integrate HIV education into comprehensive health education programs, specific HIV modules were developed to be used with two widely used comprehensive school health curricula, *Growing Healthy* and *Teenage Health Teaching Modules*. Thirty regional training centers will train school and community personnel to use comprehensive health education curricula.
Human Immunodeficiency Virus (HIV)	
12. The Committee intends that CDC give special emphasis to AIDS prevention, education, and information programs targeted to individuals at increased risk . . . The Committee believes that the funds provided for CDC AIDS information and education activities are sufficient to allow the agency to conduct a comprehensive evaluation of the impact and cost effectiveness of its national AIDS information services and programs, including the impact of CDC AIDS media campaign on the behavior of individuals whose behavior places them at increased risk.	12. In fiscal year 1989, $183,540,000, or 71 percent of CDC's HIV budget for information and education was specifically earmarked to reach high risk and minority populations. In addition, CDC's education programs for school and college-aged youth, health care professionals and emergency workers, and the general public are designed to influence the behaviors of individuals who may be at increased risk of infection, but also of individuals and institutions whose supportive actions are essential to the success of all HIV prevention programs. Within this comprehensive array of

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Human Immunodeficiency Virus (HIV)
(Cont'd)

information, education, and prevention programs, are activities that have now been funded for 1-to-5 years. The National Academy of Sciences (NAS) in its 1989 report, Evaluating AIDS Prevention Programs, has cautioned that "the evaluation of AIDS intervention programs is not an easy task. It will take time, and it will also require a long-term commitment of efforts and resources." The NAS also recommended to CDC that approximately 10 percent of program funds should be used to evaluate HIV prevention activities. CDC estimates that it currently spends close to that amount on evaluation efforts, although it recognizes the need to expand its efforts to evaluate the efficiency as well as the effectiveness of alternate approaches.

In regard to the national media campaign, which has captured more donated air time (over $50 million) and has received more individual air plays, including network plays in prime time, than any previous PHS media campaign in history, CDC has taken additional steps to increase the rigor with which individual products and the overall campaign effects are evaluated. Beginning in fiscal

Item	Action Taken or to be Taken
1990 Senate Report #101-127 Human Immunodeficiency Virus (HIV) (Cont'd)	year 1990, no less than 10 percent of all funds designated for national media campaign activities has been reserved for evaluation purposes. CDC is also awaiting the results of a feasibility study being completed by the Research Triangle Institute, which will provide guidance on conducting a trial of paid versus donated advertising.
13. The Committee continues to support the expansion of funding of prevention efforts specifically targeted toward minority populations. The differential impact that AIDS has had on minorities in the United States is of grave concern and can best be addressed by assuring that those organizations with strongest ties to the minority communities at risk be funded to undertake prevention activities.	13. Recognizing that racial/ethnic minority populations were disproportionately affected by HIV/AIDS, the CDC has dramatically increased its support of the HIV prevention efforts of minority Community Based Organizations (CBOs) (1989, $30.0; 1990, $45.0; 1991, $48.4). In FY 1989, CDC assisted minority CBOs involved in HIV prevention activities through 4 different funding mechanisms. Each program announcement of the availability of funds was explicit in its requirement that minority organizations conduct a needs assessment and provide assurances in the application that they have experience in serving the communities that they represent and with the high-risk populations at which their prevention efforts will be aimed. For example, Program Announcement entitled "Cooperative Agreements for Minority and Other Community-Based HIV Prevention Projects"--which advertised the availability of funds for the direct funding of both minority

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Human Immunodeficiency Virus (HIV)
(Cont'd)

and other CBOs--required each applicant to supply the following:

A. Its organization history, including a description of previous HIV prevention education and outreach activities and general service and education programs provided in the past;

B. Its organizational structure, the interests, and constituencies it represents, and its demonstrated and/or predicted ability to implement outreach and education programs to reduce the spread of HIV;

C. Its commitment and ability to work with a variety of organizations and governmental programs including those providing HIV prevention services, and to coordinate program development with existing governmental and private educational efforts and the degree to which the proposed program compliments, rather than competes with, State and local health department efforts;

D. Its capacity to provide sensitive and appropriate education and outreach which responds effectively to the cultural, environmental, social, and/or multilingual character of the target populations, including

Item	Action Taken or to be Taken
1990 Senate Report #101-127 Human Immunodeficiency Virus (HIV) (Cont'd)	documenting any history of such outreach or education by including previously used educational materials, program descriptions, etc. Similar prerequisites are a part of all Program announcements of availability of funds for minority CBOs.
Preventive Health Services Block Grant	
14. The Committee was pleased to learn that CDC has established a pilot program during the past year in 10 States in order to more closely monitor the use of Federal funds by the States, as well as to review programs and their impact, including the populations reached, the types of services provided, and the overall impact on health status. The Committee urges CDC to expand this approach to include 15 States during this fiscal year. The conferees are agreed that separate funding must be provided to any local health department which serves the largest political jurisdiction in a MSA, when such a MSA rwported more than 2,000 AIDS cases of June 30, 1989, and such cases represent at least 75 percent of the AIDS cases reported in that State.	14. Program operations funds are to be provided to an additional 10 States (20 total) that have the capability to develop program monitoring and reporting systems that can be replicated in other States and that are consistent with the reporting systems called for in the draft Year 2000 Objectives. During 1989, Block Grant recipients in 20 States were provided with individual workshops to address reporting requirements of the legislation and to develop program-specific mechanisms for future reporting. Also during 1989, common data elements for model program criteria were established for 10 separate program areas. In 1990, more States will be provided with workshops, model program criteria will be established for additional programs, a system for receiving and aggregating annual reports will be established, and reporting for local program services will be initiated in selected States.

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Human Immunodeficiency Virus (HIV)	Action Taken or to be Taken
15. Separate funding must be provided to any department which serves the largest political jurisdiction in a MSA, when such MSA reported more than 2,000 AIDS cases as of June 30, 1989, and such cases represent at least 76 percent of the AIDS cases reported in that State.	15. The conferees are agreed that separate funding must be provided to any local health department which serves the largest political jurisdiction in a MSA, when such MSA reported more than 2,000 AIDS cases as of June 30, 1989, and such cases represent at least 75 percent of the AIDS cases reported in that State.

Authorizing Legislation

Preventive Health Services Activity:	1990 Amount Authorized	1990 Estimate	1991 Amount Authorized	1991 Estimate
1. Preventive health and health services block grant:				
Grants: PHSA Title XIX Section 1901(a)............	Indefinite	$83,176,000	Indefinite	$83,176,000
Program Operations: PHSA Sections 301, 304, 306, 307, 308, 310, 311,....... and 327	Indefinite	$937,000	Indefinite	$943,000
2. Prevention centers: PHSA Section 1706(e)..............	$8,000,000	$3,949,000	$10,000,000	$3,949,000
3. Sexually transmitted diseases:				
Grants: PHSA Section 318(d)(1)..................	Indefinite	$70,666,000	Indefinite	$70,666,000
Program Operations: PHSA Sections 301, 307, 310, 311, and 327...............	Indefinite	$10,640,000	Indefinite	$10,754,000
4. Immunization:				
Grants: PHSA Section 317(j)(1)(A)...............	Indefinite	$130,800,000	/1	$130,862,000
Program Operations: PHSA Sections 301, 307, 310, 311, 327 and 352	Indefinite	$21,742,000	Indefinite	$21,860,000
Vaccine stockpile: PHSA Section 317(j)(1)(c)(b)......	Indefinite	$2,961,000	/1	---
5. Infectious disease prevention:				
PHSA Sections 301, 307, 310, 311, 327, 352, and 1102..................	Indefinite	$39,752,000	Indefinite	$40,621,000
Tuberculosis grants: PHSA Section 317(j)(2).........	$36,000,000	$8,334,000	/1	$8,334,000
6. Chronic and environmental disease prevention:				
PHSA Sections 301, 307, 310, 311, 327, 352, and 1102..................	Indefinite	$54,503,000	Indefinite	$56,313,000
PHSA Section 394 (a).......	$10,000,000	$22,660,000	/1	$22,660,000
7. Occupational Safety and Health:				
PHSA Sections, 301, 304, 306, 308, 310, 311, 327; the Occupational Safety and Health Act of 1970, Sections 20, 21, and 22; and the Federal Mine Safety and Health Act of 1977, Sections 101, 102, 103, 201, 202 and 203.................	Indefinite	$84,665,000	Indefinite	$85,136,000

Authorizing Legislation - Continued

	1990 Amount Authorized	1990 Estimate	1991 Amount Authorized	1991 Estimate
8. Epidemic Services: PHSA Sections 301, 307, 310, 311, 322, 325, 327, 352, 353, 361 thru 369 and 1102	Indefinite	$55,388,000	Indefinite	$68,180,000
9. Health Statistics: PHSA Sections 301, 304, 305, 306, 307, and 308	Indefinite	$48,477,000	/1	$48,128,000
10. Human Immunodeficiency Virus: PHSA Sections 301, 307, 310, 311, 317, 327, 352, and 1102	Indefinite	$442,826,000	Indefinite	$509,103,000
PHSA Title XXIII	Indefinite	---	Indefinite	---
PHSA Title XXIV, Section 2433	$100,000,000	---	/1	---
PHSA Title XXV	Indefinite	---	Indefinite	---
11. Buildings and Facilities: PHSA Section 321(a)	Indefinite	$6,910,000	Indefinite	$7,900,000
12. Program Management: PHSA Title III, XIX, and Section 1102; the Federal Mine Safety and Health Act of 1977, Sections 20, 21, and 22; and the Occupational Safety and Health Act of 1970, Sections 101, 102, 103, 201, 202, and 203	Indefinite	$3,123,000	Indefinite	$3,170,000
Unfunded Authorizations:				
1. Human Immunodeficiency Virus				
PHSA Title XXIII	Indefinite	---	Indefinite	---
PHSA Title XXV	Indefinite	---	Indefinite	---
Total Appropriation Against Definite Authorizations	$154,000,000	$35,052,000	$10,000,000	$3,949,000
Total Appropriation		$1,090,789,000		$1,171,755,000

/1 Authorization expires September 30, 1990. An extension is pending.

Disease Control, Research, and Training

	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
1982	179,193,000	231,590,000	212,187,000	231,349,000
1983	217,192,000 /1	321,039,000	329,368,000	337,916,000
1984	270,023,000 /1	373,405,000	369,896,000	374,504,000
1985	280,364,000 /1	198,802,000 /2	402,730,000	410,530,000
1986	392,092,000	441,194,000	480,277,000	471,861,000
1986 Sequester	-20,290,000	-20,290,000	-20,290,000	-20,290,000
1987	379,846,000 /3	518,254,000	541,862,000	539,067,000
1988	552,956,000	221,977,000 /4	802,987,000	771,772,000
1989	523,146,000 /5	819,941,000	979,357,000	993,830,000
1990	573,558,000 /6	1,080,180,000	1,114,338,000	1,106,559,000
1990 Reduction				-1,553,000
1990 Sequester				-14,217,000
1991	1,171,755,000			

/1 Funds for the Preventive Health and Health Services Block Grants were requested in the Grants to States for Health appropriation.

/2 Preventive Health and Health Services Block Grants, Venereal Disease Grants, and Immunization Grants not considered due to pending request for extension of authorization which expired in 1984.

/3 Funding for AIDS in 1987 in the amount of $45,800,000 was requested under the appropriation "Priority Disease Control and Research", Office of the Assistant Secretary for Health, but House allowance, Senate allowance, and appropriation included funding for AIDS in "Disease Control, Research, and Training".

/4 Funding for Preventive Health Service Block Grants, Prevention Centers, Sexually Transmitted Diseases, Grants, and Immunization Grants was deferred pending reauthorization legislation.

/5 Funding for AIDS in 1989 in the amount of $400,719,000 was requested under the appropriation of "AIDS Research and Education," Office of the Assistant Secretary for Health, but House allowance, Senate allowance, and appropriation included funding for AIDS in "Disease Control, Research, and Training".

/6 Funding for HIV in 1990 in the amount of $474,022,000 was requested under the appropriation of "AIDS Research and Education", Office of the Assistant Secretary for Health.

JUSTIFICATION

Disease Control, Research, and Training
(Dollars in Thousands)

	1990 Current Appropriation		1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Preventive Health & Health Services Block Grants:						
Grants	---	$83,176	---	$83,176	---	---
Program operations	8	937	8	943	---	+6
Subtotal	8	84,113	8	84,119	---	+6
Prevention Centers	---	3,949	---	3,949	---	---
Sexually Transmitted Diseases:						
Grants/Budgeted FTE	---	70,666	---	70,666	---	---
Program operations	164	10,640	164	10,754	---	+114
Subtotal	164	81,306	164	81,420	---	+114
Immunization:						
Grants	---	130,080	---	130,862	---	-782
Program operations	169	21,742	169	21,860	---	+118
Vaccine stockpile	---	2,961	---	---	---	-2,961
Subtotal	169	154,783	169	152,722	---	-2,061
Infectious Diseases	530	48,086	530	48,955	---	+869
Chronic and Environmental Disease Prevention	628	77,163	628	78,973	---	+1,810
Occupational Safety and Health:						
Research	853	74,204	853	74,675	---	+471
Training	---	10,461	---	10,461	---	---
Subtotal	853	84,665	853	85,136	---	+471
Epidemic Services	876	55,388	901	68,180	+25	+12,792
Health Statistics						
Program operations	431	45,271	431	44,884	---	-378
Program support	54	3,206	54	3,244	---	+38
Subtotal	485	48,477	485	48,128	---	-349
Human Immunodeficiency Virus	768	442,826	848	509,103	+80	+66,277
Buildings & Facilities	---	6,910	---	7,900	---	+990
Program Management	68	3,123	68	3,170	---	+47
Total Budget authority	4,549	1,090,789	4,654	1,171,755	+105	80,966
Reimbursable FTE	478 /1		478 /1		---	
Total FTEs	5,027		5,132		+105	

/1 Includes 250 FTEs included for the Agency for Toxic Substances and Disease Registry.

The Centers for Disease Control (CDC) is the focal point within the Public Health Service (PHS) for disease prevention and control. CDC seeks to improve the health and quality of life of people in the United States through eliminating or reducing preventable death, illness, disability, and health care costs. CDC pursues these general goals by focusing efforts on the specific 1990 and 2000 PHS Health Objectives; CDC activities include conducting investigations, studies, surveillance, and training, and developing health promotion strategies. The President's FY 1991 Budget ensures that Federal assistance for attacking public health threats through CDC will continue.

Through grants, applied research, and technical assistance to States, localities, and other entities, the Centers for Disease Control attempts to prevent or control the introduction and spread of infectious diseases and promote more healthful lifestyles. The Preventive Health and Health Services Block Grant supports State and local preventive health services. Direct program operations by Federal staff, cooperative agreements, and categorical immunization and sexually transmitted disease grants are other key assistance mechanisms. CDC is centrally involved in the Public Health Service's efforts to monitor, understand, and prevent the further spread of the Human Immunodeficiency Virus (HIV).

CDC uses the following strategies to target funds for prevention and control of threatening diseases and conditions:

- An examination of the amount of death, illness, disability, Years of Potential Life Lost (YPLL), and health care costs related to a particular disease, and the availability of prevention and control strategies. Such evaluations include cost benefit analysis of various disease prevention applications.

- The estimated Years of Potential Life Lost (YPLL) provides a basis for directing scarce resources to obtain maximum benefit. When considering diseases or conditions that should be targeted, CDC examines the tools that are available to prevent or control the disease, cost of these tools, demographics of the disease, efforts being made by State, local, and other Federal agencies, and the impact that the program will have on morbidity and mortality and the quality of life.

- Where prevention and control strategies have already been effective such as with polio, mumps, measles, and rubella, the goal is to maintain or improve upon these accomplishments. These strategies must be continued to ensure that the people of this country are protected.

- In diseases that rarely occur, such as rabies, Lassa fever, Ebola-Marburg hemmoraghic fevers etc., and in those diseases that have been eradicated such as smallpox, a baseline competency is required at CDC to protect the health of the nation should disease unexpectedly increase or reoccur.

- Where prevention and control strategies exist but have not been fully exploited, CDC assists States and localities to implement them at the service delivery level as in the case of breast and cervical cancer, injuries, hepatitis B, and human immunodeficiency virus.

- Where the basic research is available but the prevention and control strategies are incomplete, inadequate, or non-existent such as with Lyme disease, chlamydia, etc., CDC attempts to gain an understanding of the disease, its health impact, and to develop strategies for its prevention and control.

- Where the prevention and control strategies are required by regulation or law, or requested by Congress, such as quarantine responsibilities and vessel sanitation inspections, CDC carries out these responsibilities.

Table 1 lists the causes of death and also compares Years of Potential Life Lost (YPLL) from deaths occurring in 1986 and 1963. Of the nearly 5 million fewer years of potential life lost in 1986 compared to 1963, 4 million were due to improvements in preventing infant mortality. Nearly 600,000 YPLL were saved by preventing and postponing death due to heart disease. In contrast, there has been virtually no progress made in preventing deaths and YPLL from unintentional injuries. Suicide and homicide have doubled during this period.

January 1964 marked the release of the first Surgeon Generals' Report on Smoking. Between 1963 and 1986, more than 500,000 smoking-related deaths were avoided or postponed as a result of decisions to quit smoking or not to start. Some of this impact is seen in reduction of YPLL in deaths due to heart disease and cerebrovascular disease; however, YPLL due to lung cancer have increased dramatically. The highest incidence of smoking was in the 1940's and this increase in lung cancer is the long-term effect of that behavior. Only now is lung cancer among younger men beginning to decrease.

The reduction of YPLL due to cervical cancer is impressive. But the fact that any women die of cervical cancer is troublesome, since medical technology exists to significantly reduce the threat of this disease.

The reduction in YPLL from pneumonia and influenza is impressive; however, 1963 was a year during which there was an epidemic of influenza which claimed over 9,000 lives during a 10-week period in January and February. This emphasizes the need to maintain our capacity in infectious diseases. Continued efforts in developing and implementing influenza vaccine programs among high-risk populations cannot be sporadic or begun after a flu epidemic has struck.

Table 1

Estimated years of potential life lost (YPLL) before age 65 and cause-specific mortality, by cause of death - United States, 1988 and 1963

Cause of Mortality	YPLL for Persons Dying in 1963	YPLL for Persons Dying in 1988	Change
All Causes (Total)	16,854,108	12,281,741	(4,572,367)
All Infant Mortality	6,668,655	2,505,965	(4,162,690)
Neonatal Mortality	4,849,134	1,632,132	(3,217,002)
Postneonatal Mortality	1,852,709	887,146	(965,563)
Unintentional Injuries	2,512,269	2,319,400	(192,869)
Malignant Neoplasms	1,795,856	1,809,289	13,433
Lung Cancer	105,679	446,243	340,564
Breast Cancer	197,866	229,473	31,607
Cervical Cancer	86,803	44,040	(42,763)
Diseases of the Heart	2,128,149	1,466,629	(661,520)
Suicide/Homicide	634,563	1,361,473	726,910
Congenital Anomalies	1,187,878	671,709	(516,169)
Prematurity	NA	432,342	NA
Sudden Infant Death Syndrome	NA	296,304	NA
Acquired Immunodeficiency Syndrome	NA	472,800	NA
Cerebrovascular Disease	440,762	245,722	(195,040)
Chronic Liver Diseases and Cirrhosis	243,324	236,944	(6,380)
Pneumonia and Influenza	985,705	172,712	(812,993)
Chronic Obstructive Pulmonary Diseases	116,196	128,126	11,930
Diabetes Mellitus	139,943	130,666	(9,277)

NA - not available

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The following tables is a summary of the FY 1990 Appropriation by program, project, and budget activity showing the personnel cost reduction and the sequester amount.

Summary of FY 1990 Appropriation
By Program, Project, or Activity
($000)

	Budgetary Resources			
Program, Project, or Activity	Conf. Action	Personnel Cost Reduction	Sequester	Post Sequester
Preventive Health Services				
*Block Grant Reporting........	496	1	6	489
Other...........................	84,704	1	1,089	83,614
Prevention Centers..............	4,000	0	51	3,949
Lead Poisoning Prevention	4,000	8	51	3,949
All Other....................				
Sexually Transmitted Diseases:				
Grants.......................	71,586	0	920	70,666
Direct Operations............	10,800	21	139	10,640
Immunization:				
Grants:				
MMR, DTP, Polio, and H. Influenzae B Vaccine	87,212	0	1,114	86,098
State Operations..........	18,891	0	250	18,641
Parent Notification.......	6,126	0	79	6,047
Excise Tax................	2,964	0	38	2,926
*Measles Outbreak Control.	10,000	0	129	9,871
*Hepatitis B Screening and Control...............	8,000	0	103	7,897
Direct Operations:				
*Measles Outbreak Control....	500	1	6	493
*Hepatitis B Screening and Control..................	2,500	5	32	2,463
Infant Immunization Demonstrations............	8,000	16	103	7,881
All Other....................	8,500	17	109	8,374
Adverse Event Reporting......	2,569	5	33	2,531
Vaccine Stockpile............	3,000	0	39	2,961

Summary of FY 1990 Appropriation By Program, Project, or Activity ($000)

	Budgetary Resources			
Program, Project, or Activity	Conf. Action	Personnel Cost Reduction	Sequester	Post Sequester
Infectious Diseases:				
Lyme Disease................	2,000	4	26	1,970
Clinical Laboratory Studies.	200	0	3	197
All Other..................	38,166	75	490	37,601
Tuberculosis Grants............	8,443	17	108	8,318
Chronic and Environmental Disease Prevention:				
Diabetes Grants............	4,861	10	62	4,789
Hanford Thyroid Study.......	600	1	8	591
Breast and Cervical Cancer..	5,000	10	64	4,926
Chronic Fatigue Syndrome....	407	1	5	401
Disabilities Prevention.....	4,500	9	58	4,433
Diabetes Translation Center.	2,393	5	31	2,357
Chronic Disease Date Collection and Analysis				
Injury Prevention and Control	23,000	45	295	22,660
All Other..................	33,562	66	431	33,065
Occupational Safety & Health:				
Research:				
Worker Notification.......	500	1	6	493
Surgeon General's Conference on Rural Safety & Health	125	0	2	123
Surveillance.............	4,000	8	52	3,940
Research - Centers for Agricultural Occupational Safety and Health......	2,000	4	26	1,970
Research - Lung Disease among Agricultural Workers...	1,000	2	13	985
Intervention.............	4,250	8	55	4,187
Musculoskeletal Disorders And Respiratory Health.	1,000	2	13	985
Construction Worker Health And Safety............	1,000	2	13	985
All Other................	61,450	121	793	60,536
Training:				
Industrial Med Center, W. VA. University......	250	0	3	247
All Other................	10,348	0	134	10,214

Summary of FY 1990 Appropriation
By Program, Project, or Activity
($000)

	Budgetary Resources			
Program, Project, or Activity	Conf. Action	Personnel Cost Reduction	Sequester	Post Sequester
Health Statistics:				
Program Operations...........	44,533	87	575	43,871
Program Support..............	3,254	6	42	3,206
Epidemic Services................	56,217	108	721	55,388
Buildings & Facilities...........	7,000	0	90	6,910
Program Management...............	3,170	6	41	3,123
Human Immunodeficiency Virus....				
Epidemiology and Surveillance	127,325	249	1,634	125,442
Prevention, Information, and Education:				
General Public...........	33,327	65	428	32,834
American Red Cross.......	7,000	14	90	6,896
School and College Aged Youth	39,051	76	501	38,474
Comprehensive Health Education - Regional Training Programs	3,000	6	38	2,956
Comprehensive Health Education - Cirricula Dissemination	500	1	6	493
Health Education/Risk Reduction.............	29,070	57	373	28,640
Training of Health Care Workers...............	4,029	8	52	3,969
Minority Projects:				
Minority Emphasis Proj.	14,515	28	186	14,301
Other Minority Activities	31,111	61	399	30,651
Hemophilia Projects......	11,154	22	143	10,989
Other Prevention, Information, and Education.........	23,073	45	296	22,732
Counseling, Testing and Partner Notification.....	119,402	234	1,531	117,637
Other HIV Activities........	6,195	14	89	6,812
TOTAL................	1,106,559	1,553	14,217	1,090,789

Summary of the CDC FY 1991 Request
($000)

FY 1990 Post Sequestered Appropriation	$1,090,789
Non recurring items:	
Occupational Safety and Health - Surgeon General's Conference on Rural Safety and Health	-123
Building and Facilities - high priority Construction projects	-4,936
Program decreases:	
Immunization:	
Vaccine stockpile	-2,961
Parent/patient notification	-3,047
Program increases:	
Reduce infant mortality	11,500
Human Immunodeficiency Virus	65,686
Repairs and improvement	5,926
Mandatory increases:	
50% of Jan. 1991 pay raise	3,243
Other	5,678
FY 1991 President's Request	$1,171,755

The President's FY 1991 Budget requests $1,171,755 for the prevention, control, research, and training activities of the Centers for Disease Control. This budget is consistent with a vigorous Federal role in public health, for which responsibility is shared between the private sector, and Federal, State, and local governments. Through effective operation of Federal/State/local governments and private sector partnerships in the past, illness, death, disability, and health care costs for many diseases and conditions have been reduced. This budget preserves essential public health programs and proposes increases to reduce infant mortality and to repair the Center's aging facilities.

FY 1991 Program Increases

Reduce the Backlog of Repair Projects
($7,900,000)

CDC facilities require resources to continue to operate at a physically and scientifically acceptable level. CDC has a list of repairs required to restore the facilities to an acceptable level that totals almost $30.0 million. The request includes $2.0 million for annual on-going maintenance and $5.9 million to permit CDC to begin to reduce the backlog of major repair projects.

Reduce Infant Mortality
($11,500,000 and 25 FTEs)

This increase will address the need to reduce infant mortality. Four out of the top 10 causes of premature life lost from 0-65 years of age relate to infant mortality. Over 1.5 million years of potential life (YPLL) are lost each year because of infant deaths. Minorities share disproportionately in YPLL related to infant mortality. Several major studies have indicated that many of these deaths could be prevented--and the disparity between blacks' and whites' infant mortality rates reduced--if known interventions were to be applied.

The failure to meet the 1990 Prevention Objectives for Infant Mortality and to reduce the unacceptable gap between black and white infants' survival was due in part to the States' lack of sufficient data and statistical and epidemiological capacity to target existing resources, to develop new interventions, and to monitor program impact. CDC will award grants and provide technical assistance to ____ states to improve their capability to collect and analyze infant mortality surveillance data. Surveillance of key birth outcomes, such as low birthweight and birth defects, will be linked to infant mortality and to key preventable parental risks and the maternal and child health and nutrition programs designed to prevent and treat those risks. This surveillance and epidemiologic approach has been piloted in Mississippi and led to increased State support for their MCH program with funding of high risk pregnancy projects, early adoption of increased Medicaid eligibility, and an accelerated decline in infant mortality when compared to other southern States.

This initiative will complement the Health Resources and Services Administration (HRSA) and State activities funded through the Maternal and Child Health Block Grant. This initiative can be a catalyst to increase the effectiveness of every dollar now spent for MCH services. It is appropriate for CDC to provide the PHS leadership for surveillance and epidemiologic assistance for infant health issues, as CDC is the lead agency for surveillance and related technical assistance, both national (through NCHS) and State-based, in the area of infant health. At present, State MCH programs have little access to surveillance expertise and analytic capability--areas of CDC leadership. Existing surveillance activities in States are incomplete and do not permit State-to-State comparisons, adequate linkage to national surveillance efforts, or appropriate monitoring of quality control issues. The provision of epidemiologic assistance has been the subject of an interagency agreement between HRSA's Office of Maternal and Child Health and CDC. CDC and HRSA jointly identify priority States, and epidemiologists are assigned to State Health Departments to assist in the analysis of existing information for State programs on a limited basis. This initiative will expand this program and permit coordinated efforts to enhance all MCH surveillance and epidemiologic assistance efforts in the States. Assistance will be provided through augmented support for national surveillance efforts, statistical and epidemiological assistance, and consultation.

Prevent Human Immunodeficiency Virus Infection
($66,277,000 and 80 FTEs)

The request includes increases of:

- $4,054,000 and 2 FTEs to undertake evaluations designed to document the impact of alternative counseling techniques on behavior and subsequent HIV serostatus among high-risk persons of different socio/demographic characteristics, especially poly-drug users, sex partners of infected persons, and minority populations.

- $14,043,000 and 7 FTEs to prevent HIV transmission among women and infants.

- $4,054,000 and 4 FTEs to assess the effectiveness of street outreach in reducing rates of HIV infection in IVDUs and in their sex partners.

- $1,737,000 and 5 FTEs to annualize funding for approximately 32 minority organizations and consortiums which are currently supported through the National and Regional Minority Organizations Grant Program.

- $5,231,000 and 7 FTEs to build the HIV prevention capacities or organizations that provide social, economic, and other services to youth who are most likely to engage in high-risk behaviors.

- $5,647,000 and 4 FTEs to maintain an adequate supply of materials in the National AIDS Information Clearinghouse (NAIC) to meet the anticipated public demand.

- $1,303,000 and 3 FTEs to sustain the level of services provided to the public by the National AIDS Hotline.

- $3,040,000 and 5 FTEs to develop and evaluate a simplified reporting system for symptomatic HIV-related disease and health-care costs in selected geographic areas.

- $2,606,000 and 5 FTEs to provide financial support and technical assistance to standardize HIV reporting and to receive and disseminate summary data from 15-20 States with HIV reporting.

- $4,343,000 and 5 FTEs to conduct a major epidemiologic study of surgeons and other appropriate personnel in 5-10 U.S. hospitals and appropriate settings to estimate the frequency of blood exposures, the risk of infection attributable to these exposures, the determinants of exposure, and efficacy of preventive measures.

- $3,475,000 and 1 FTE to expand HIV-related laboratory training and quality assurance.

- $16,744,000 cost-of-living increase of base program and restoration of FY 90 sequester.

Program Accomplishments

CDC has achieved tremendous accomplishments in the area of traditional public health programs: controlling infectious diseases, providing immunizations, controlling sexually transmitted diseases, and operating the quarantine program. CDC's influence has been world-wide. The Agency's participation and contribution to the eradication of smallpox was a major cause of the campaign's success. The amount contributed by the United States during this world-wide campaign is now saved every 3 months because routine smallpox vaccination is no longer required.

CDC now strives to eliminate not only infectious diseases, but also chronic diseases and conditions, injuries, environmental and occupational hazards, and other preventable health problems. Recent program accomplishments include:

- CDC provided support to 25 State health departments for planning and priority setting efforts in chronic disease prevention and control. This has led to documented increases in State capacity and support. This effort is closely coordinated with efforts to support the targeting and accountability of the Preventive Health and Health Services Block Grant funds for chronic diseases, the single largest federal funding source for health promotion and chronic disease prevention programs at the State level.

- CDC established a national system for providing AIDS-related school health education as part of comprehensive programs aimed at improving adolescent health behaviors. This program has enlisted the support of the national and State parent-teacher associations, school boards, principals, and teachers. As part of this program, State-specific surveillance of key adolescent health risks has been established to solve one of the most pressing data needs for the 1990's.

- CDC provided fiscal support and technical assistance to seven States and the Navajo Nation for preventable cancers, focusing especially on breast and cervical cancers. National results are showing that many women, especially those over 40, are not getting screened, despite seeing physicians for other problems. In some areas, followup of positive smears appears to be a problem. Interventions to improve these weaknesses are under way.

- As recommended by the National Diabetes Advisory Board, CDC established a federal focus for translation of research findings into widespread practice with increased prevention and health services research, while continuing support to 30 States.

- CDC developed a new guide for prevention services in diabetes mellitus. This guide has received wide review by expert clinicians, voluntary organizations (American Diabetes Association, American Association of Diabetes Educators, etc.), and federal experts and is expected to set the standard for preventive care in diabetes mellitus.

- CDC played an important role, in collaborating with the U.S. Consumer Product Safety Commission (CPSC) and the Alaska Department of Health and Social Services, in the recent decision to stop the sale of three-wheeled, all-terrain vehicles (ATVs) in the U.S. A CDC epidemiologist, in collaboration with Alaska's State Epidemiologist, developed the Nation's first published, peer-reviewed study of the ATV problem. This study generated similar investigations in other States and Canada, and provided the CPSC with evidence essential to their decision.

- CDC monitors the incidence of some 150 kinds of birth defects and provides technical assistance to 25 birth defects surveillance programs in States. CDC assisted in the establishment of a new International Centre for Birth Defects (located in Norway), an organziation devoted to finding the causes of birth defects through surveillance and epidemiology.

- CDC has determined the prevalence of mental retardation, cerebral palsy, blindness, deafness and epilepsy in a large population-based study of 10-year old children. These data provide the most reliable source of data to project the national prevalence of these conditions and to judge how well we are doing to prevent these conditions.

- CDC has developed a sensitive blood test to detect exposure to tobacco smoke by nonsmokers as well as smokers. In a 6-year survey (1988-94), the blood test is being applied to over 30,000 Americans who collectively are representative of the U.S. population.

- CDC has developed measurements to quantify human exposure to 52 priority toxicants including volatile organic compounds (i.e., the principal indoor air pollutants) and organic pesticides.

- Under the leadership of the CDC unit of sanitarians and sanitary engineers assigned to the National Park Service (NPS), the NPS was the first federal agency to survey all of its housing for radon.

- Early research efforts at the Harborview, Washington Injury Prevention Research Center have already shown the efficacy of bicycle riders wearing helmets, and work at the Harvard Injury Prevention Research Center is showing the efficacy of interventions in preventing motor vehicle injuries.

- A major task force report on youth suicide reviewed the literature and strategies for preventing youth suicide, and CDC was instrumental in bringing together a variety of interested parties to develop guidelines for the prevention of suicide clusters.

- In fiscal year 1989, the prevention of infectious syphilis, gonorrhea and chlamydia remained a priority of the CDC. During this period, 12,400 potential cases of syphilis, 181,700 potential cases of gonorrhea, 80,200 potential cases of chlamydia were prevented as a result of screening and other outreach efforts. By preventing these infections, potential sequelae of the diseases, such as heart disease, neurosyphilis, pelvic inflammatory disease and ectopic pregnancy, were also prevented.

- Sexually transmitted disease intervention activities in fiscal year 1989 included the testing of over 217,000 syphilis, 6,100,000 gonorrhea, and 1,800,000 chlamydia patients. As a result of these testing activities, almost 20,000 cases of infectious syphilis, 254,000 cases of gonorrhea, and almost 268,000 cases of chlamydia were detected.

- The CDC developed and published revised STD treatment guidelines in 1989. Traditionally this publication has been the most requested CDC publication. This addition of the treatment recommendations, management of the HIV infected person, the impact of HIV infection on STD clinical manifestations and treatment, and recommends replacing penicillin as the primary therapy for gonorrhea with ceftriaxone.

- In June 1988, CDC and the Immunization Practices Advisory Committee recommended screening of all pregnant women for hepatitis B and prevision of preventive treatment for infants of infected mothers. With this approach, the infants can be protected from becoming hepatitis B carriers and from contracting liver diseases caused by the hepatitis B virus.

- Diarrheal diseases and respiratory problems are more than twice as common among children attending day care, which has serious implications as more young children are cared for outside of their homes. A CDC survey found that 10 of 18 Atlanta day care centers had Giardia prevalence rates from 6 percent to 40 percent while eight centers had no children infected. CDC is assessing the economic and public health impact of these infections.

- Immunization levels for children entering school for the first time in the 1987-88 school year was the highest ever--98 percent for measles, mumps, and rubella and 97 percent for DTP and polio. This has resulted in the virtual elimination of measles, rubella, tetanus, polio, and diphtheria from the U.S.

- The 1990 morbidity objectives for diphtheria, polio, rubella, congenital rubella syndrome, and tetanus have been met.

- Since 1963, over 71 million cases of measles and 22,100 cases of mental retardation have been averted, and 7,100 children's lives have been saved as a result of measles immunization.

- CDC developed a Strategic Plan for Elimination of Tuberculosis in the United States. If the recommendations are completely implemented, the U.S. can reach the goal of tuberculosis elimination by the year 2010 and the interim target of 3.5/100,000 population by the year 2000.

- CDC has developed laboratory methods to provide an early warning of the circulation of wild polioviruses in a community. This technique will enable the eradication of indigenous wild poliovirus in the Americas.

- CDC, in conjunction with the California and Los Angeles County Health departments, conducted an epidemic aid investigation which documented the first proven outbreak of influenza among passengers on a cruise ship.

- CDC identified the spread from China to the United States of a new variant "Sichuan Flu".

- CDC completed a feasibility study for Chronic Fatigue Syndrome (CFS) surveillance among a group of general internists in Georgia and Nevada. The study indicated that about 40 percent of physicians reported having seen incident cases of CFS in the preceding 6 months.

- A telephone taped information system on health requirements and recommendations for international travel was developed to provide timely comprehensive information for the travelling public.

- CDC responded to more than 90,000 requests for health information, mainly by telephone, from international travelers, and published and distributed the bi-weekly "Summary of Health Information for International Travel" (Blue Sheet) to 13,300 regular subscribers.

- CDC's National Center for Health Statistics began field operations for several major national surveys, including the National Health and Nutrition Examination Survey, the National Survey of Family Growth, and the National Maternal and Infant Health Survey, and made progress in implementing the National Health Care Survey, which will result in significant improvements in the way health care is monitored. NCHS also modified several national surveys to obtain data on AIDS, including a major effort to monitor the public's knowledge and attitudes about AIDS risk factors, transmission, and related information.

- CDC's National Institute for Occupational Safety and Health has developed a list of the Ten Leading Work-Related Diseases and Injuries. These conditions provide the basis for establishing research priorities and public health strategies.

- CDC published "A Recommended Standard for Occupational Exposure to Radon Progeny in Underground Mines."

- CDC's National Institute for Occupational Safety and Health has developed a list of the Ten Leading Work-Related Diseases and Injuries. Public health strategies have been published which define the nature of each condition, describe preventive measures that can be taken now, and indicate knowledge needed for the future, and are being used to direct NIOSH's research in these areas.

- During FY 1987, NIOSH embarked upon a program to review its completed epidemiologic studies to determine whether subjects of the studies should be individually notified of the results. In 1989, worker notification profile analyses were completed on five mortality and morbidity studies. In 1990, worker notification profile analyses will be conducted on ten different mortality and morbidity studies. In 1990, three study-worker notifications will be initiated.

- CDC published "Criteria for a Recommended Standard: Occupational Exposure to Hand-Arm Vibration." A cornerstone of this standard is the requirement for medical monitoring of all vibration-exposed workers to identify the first signs and symptoms of hand-arm vibration syndrome (HAVS) and to remove affected workers from the job until they are free of all vibration-related symptoms.

- CDC published Alert: "Request for Assistance in Preventing Electrocutions of Workers Using Portable Metal Ladders Near Overhead Power Lines". This Alert describes six deaths that occurred because portable aluminum ladders, which are electrical conductors, came in contact with energized overhead power lines. If nonconductive ladders had been used instead, or if safe working clearances had been maintained, these deaths might have been prevented.

- CDC's NIOSH completed a major evaluation to determine why some coal miners do not participate in medical surveillance to identify cases of coal workers' pneumoconiosis. As a result of the evaluation, NIOSH initiated efforts to improve miner participation involving worker education.

- CDC's NIOSH developed a method to identify the surface composition of respirable mineral particles, using electron microscopy. This method will be important for evaluating mineral dusts for their toxicological properties.

- CDC's NIOSH developed a method to assay the potential cancer-causing genotoxicity of respirable particles in pulmonary fluid, rather than in solvent. Using this new method, NIOSH has found that whole diesel exhaust soot particles and other respirable smoke particles are active mutagenic agents when dispersed in pulmonary fluid.

- NIOSH, jointly with the American Industrial Hygiene Association, is conducting a program to improve the accuracy of asbestos fiber exposure measurements performed at asbestos removal operations. The program evaluates the performance of individual asbestos counters. There are presently over 1,000 counters enrolled. Improving the accuracy and speed of asbestos counters is essential to evaluating asbestos exposures and ensuring proper control of these exposures during asbestos removal.

- NIOSH completed a large study investigating work-related respiratory problems among mushroom farm workers. As a result, NIOSH recommended measures for reducing exposures to organic dusts.

- NIOSH has developed and published an approach for organizing a comprehensive back injury control program for nursing staff, who are a worker population at high risk for back injuries.

- In FY 1989, NIOSH intensified its investigation of cumulative trauma disorders (CTD) among workers in the meat and poultry processing industries; workers using computer keyboards in the news industry; and among workers in grocery stores using laser scanning devices. The studies in the meat and poultry industries have revealed many specific work practices that result in CTDs, enabling NIOSH to recommend prevention measures.

- In a study of uranium miners, NIOSH confirmed that exposure to radon progeny is a potent carcinogen in the absence of cigarette smoking. The results of this research are important evidence regarding the control of exposures to radon progeny and have been published and presented for broad dissemination among scientific and public health communities.

- Conducted epidemiologic studies and analyses of HIV infection in long-term survivors of HIV infection, homosexual men, healthy males with lymphadenopathy, intravenous drug abusers, persons with hemophilia, dialysis patients, transfusion-associated AIDS cases, pediatric AIDS, sexual partners of persons with AIDS or at increased risk for infection, health-care workers, and studies to examine the risk factors for transmission associated with heterosexuals and female prostitutes.

- Collaborated with the Government of Zaire, the National Institute of Allergy and Infectious Diseases (NIAID), and the Institute of Tropical Medicine (Belgium), to conduct active AIDS surveillance, epidemiologic studies, and laboratory investigations in support of Project SIDA HIV-related projects.

- Funded 65 Cooperative Agreements with State and local health departments, the District of Columbia, the Commonwealth of Puerto Rico, and U. S. Trust Territories to support active surveillance of AIDS cases.

- Managed a contract for mathematical and computer simulation models to describe both the transmission and spread of HIV infection and the incidence of AIDS associated with routes of transmission. Models will be used to assist in projecting the number of infected individuals and AIDS cases through 1993 by transmission category, age group, gender, and race/ethnic group.

- Implemented a national HIV seroprevalence Family of Surveys plan through State and local health departments and additional organizations to reach selected U.S. populations including: military recruits, American Red Cross blood donors, STD clinic patients, IVDUs, family planning clinic patients, childbearing women, Job Corps applicants, prisoners, migrant workers, college students, and other populations.

- Produced and distributed a cumulative monthly surveillance summary of AIDS cases reported to CDC.

- Increased the number of studies of pediatric AIDS cases and transmission, including expanded perinatal transmission studies and development of a comprehensive pediatric AIDS case report form.

- Expanded sentinel hospital-based surveillance to 40 hospitals to determine prevalence and trends of HIV infection in patients.

- Continued studies with a DNA amplification technique, the polymerase chain reaction, to rapidly detect HIV genetic sequences in chromosomal DNA.

- Continued studies on newly recognized human herpes virus (HIV6) in patients with HIV infection.

- Continued laboratory surveillance for the introduction of new HIV variants into the U.S. Intensified work continues to document the presence of HIV-2 infections in the U.S.

- Continued studies to increase understanding of the duration of HIV infection before the detection of antibody.

- Continued studies to develop sensitive and specific diagnostic tests for antibodies to detect early infection.

- Initiated or expanded studies of dual infections with HIV-1 and HIV-2 through Project Retro-C.I. in Abidjan, Cote d'Ivoire, West Africa.

- Continued studies to better understand animal models of HIV and Simian Immunodeficiency Viruses (SIV) to define the pathogenicity and significance of immune responses to these viruses.

- Provided ongoing consultation and laboratory support to assist producers of HIV antibody tests, manufacturers of prophylactic and therapeutic agents, and other organizations in their continuing development of new diagnostics, treatments, and potential vaccines.

- Continued to provide extensive support to AIDS/HIV epidemiology, surveillance, and research projects.

- Enrolled over 1400 laboratories in the CDC voluntary HIV Model Performance Evaluation Program.

- Developed a cooperative agreement to support 64 minority and other community-based organizations (CBOs) in 27 metropolitan statistical areas with the highest number of reported AIDS cases. More than half of the $9.9 million was awarded to CBOs which represent and serve racial and ethic minority populations.

- Implemented a program to support initiatives in 53 State and local health agencies to prevent HIV in racial and ethnic minority populations. More than 281 organizations received support through this funding mechanism.

- Co-sponsored the third National Conference on the Prevention of HIV Infection and AIDS in Racial and Ethnic Minorities in August 1989.

- Implemented a National and Regional Minority Grant Program and awarded grants to 32 organizations for a total of $6.2 million.

- Provided support and technical assistance to the United States Conference of Mayors for seed funding and technical assistance to 23 minority community-based organizations in fiscal year 1989.

- Provided support to fund health education/risk reduction, counseling and testing, partner notification, public information activities and racial and ethnic minority initiatives in 63 States, cities, and territories and consolidated their funding into one cooperative agreement with the previously separate Surveillance Cooperative Agreements. Provided support to extend counseling and testing activities to STD, TB, drug abuse and women's and children's clinics. In fiscal year 1990, 65 States, cities and territories will be funded.

- Monitored and provided technical assistance to eight cooperative agreements with States, localities and another non-profit entities to implement and evaluate approaches to preventing perinatal transmission of HIV infection.

- Provided continued support to seven community-based demonstration projects to allow the assessment and validation of intervention strategies for use in ongoing programs.

- Provided continued technical support, in collaboration with HRSA and the National Hemophilia Foundation, for targeted health education and risk reduction efforts directed to persons with hemophilia and their sex partners.

- Developed, in collaboration with HRSA, professional training programs for health care professionals to permit health care delivery systems to respond to the needs for information as well as technical services.

- Established an interagency agreement with HRSA to support pilot programs for HIV prevention and treatment in community health centers.

- Developed protocols for studies to evaluate the impact of HIV counseling and testing in drug treatment centers and to evaluate the effectiveness of partner notification in a variety of settings.

- Integrated specialized counseling information and skills into ongoing public health training programs associated with the HIV epidemic, and developed and delivered specific educational and training seminars to respond to scientific breakthroughs.

- Provided support to 20 national education and health organizations that work to increase the number of schools and youth serving agencies providing HIV education for youth. In 1989, many national organizations developed and disseminated materials to inform the Nation's educators about the need for HIV school health education and the role that educators, school superintendents, school boards, and others can play to support schools in their HIV education efforts.

- Provided support to State and local departments of education to help schools implement HIV education programs. In 1989, virtually every State department of education in the country provided teacher training programs to enable them to teach students about HIV. For example, over 12,200 teachers, school administrators, school board members, and parents were trained through 6 AIDS regional training centers established by the New York State department of education.

- Expanded a materials development and dissemination system to identify, develop, and provide information about interventions that can be used to help school and college-aged populations avoid risks for HIV infection and other important health problems. These materials include curricula, films, videotapes, audio tapes, policies on health education, policies on disease and injury control, books, teacher training programs, materials for parents, brochures, etc. Over 400 abstracts describing these materials have been entered into a database for easy access by educators.

- Provided support for training and demonstration centers to train school and community personnel to implement state-of-the-art interventions that can help young people avoid risks for HIV infection and other important health problems.

- Expanded the surveillance system for assessing school-based HIV education programs so that funded State and local departments of education will be able to determine the number and percentage of: 1) schools that provide HIV education at each grade level; 2) students that receive HIV education at each grade level; and 3) schools that provide HIV education within comprehensive school health education programs. In addition, 42 State and 15 local departments of education conducted surveys to assess HIV-related knowledge and beliefs among samples of high school students in their jurisdictions. Finally, a similar survey was conducted of a national sample of high school students in the United States to assess on a national level HIV-related knowledge and beliefs.

- Continued development of an evaluation research system by offering two training conferences to help State and local Departments of Education evaluate and consequently improve their efforts to reduce risks for HIV infection and other health problems, to conduct research about the effectiveness of specific disease interventions, and to identify principal determinants of HIV-related and other health risk behaviors.

- Established an evaluation research system to help State departments of education evaluate and consequently improve their efforts to reduce risks for HIV infection and other health problems, to conduct research about the effectiveness of specific disease interventions, and to identify principal determinants of HIV-related and other health risk behaviors.

- Developed and disseminated "Guidelines For The Prevention Of Transmission Of Human Immunodeficiency Virus and Hepatitis B Virus to Health-Care and Public-Safety Workers" and "A Curriculum Guide For Public-Safety and Emergency-Response Workers" within 90 days as required by "The Health Omnibus Programs Extension Act".

- Utilized the National AIDS Hotline System including its Hispanic service and a TDD service for the hearing impaired to answer approximately 2 million calls.

- Established, in collaboration with other Public Health Service agencies, the clinical trial and drug protocol toll free telephone information service for public access.

- Developed and implemented a parents and youth public information program.

- Awarded grants to 10 national organizations to expand prevention efforts to selected populations.

- Provided funds to non-Federal, private sector organizations to facilitate conferences and workshops on HIV prevention and to provide scholarships for increasing attendance of racial and ethnic populations minority and people with AIDS. Organizations funded included National AIDS Network, National Association of People with AIDS, Americans for a Sound AIDS Policy, and Eagles Foundation (minority ministers).

- Secured, since October 1987, over $36,800,000 in free public service television airtime for the National Public Information Campaign. Numerous prestigious awards were received in fiscal year 1989 by the Campaign including: (1) a Silver Anvil Award from the Public Relations Society of America, for the second consecutive year, (2) two CEBA awards -- (Communications Excellence to Black Audiences), and (3) a CLIO award for Hispanic messages.

- Supported the Public Health Service's AIDS Awareness Month -- October 1989--and the World Health Organization's World AIDS Day on December 1.

- Distributed technical information products, including over 190,000 slides, to the scientific and educational communities.

- Published and disseminated 13 MMWR articles (in final and camera-ready form) containing guidelines and recommendations concerning the prevention and control of HIV infection.

Preventive Health and Health Services Block Grant

Authorizing Legislation - Section 301, 304, 306, 307, 308, 310, 311, 327, and Title XIX of the Public Health Service Act (PHS).

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Grants	---*	$83,176,000	---*	$83,176,000	---	$---
Program Operations	6	937,000	6	943,000	---	$+6,000
Total	6	84,113,000	6*	84,119,000	---	$+6,000

1991 Authorization
Grants................................Indefinite
Program Operations...................Indefinite

*Excludes FTE in both 1990 and 1991 for Staff assigned at the request of States to assist in managing State Preventive Health and Health Services Block Grant programs.

Funding levels for the past five fiscal years were as follows:

1986	87,549,000
1987	89,525,000
1988	85,733,000
1989	84,704,000
1990	84,113,000

*after sequester

Purpose and Method of Operation

This block grant provides States with funds for preventive health services not covered by categorical grants to reduce preventable morbidity and mortality and improve the quality of life. These grants give the State greater flexibility in deciding how available funding will be used to meet State priorities in preventive health services. Beginning in FY 1982, eight categorical programs were consolidated into the Preventive Health and Health Services Block Grant. With the passage of the Health Omnibus Programs Extension Act in 1988, five additional preventive health activities became eligible for the States to support with funds from this block grant. All thirteen activities are listed below:

- Supporting comprehensive public health services (PHS Act Section 314(d)).

- Providing for community-based programs to help people reduce health risks and supporting programs to deter smoking and use of alcoholic beverages among children and adolescents (Health Services and Center Amendments of 1978 - Sections 401 & 402).

- Establishing and maintaining preventive health programs to detect and prevent hypertension (PHS Act Section 317).

- Planning, establishing, or improving emergency medical services systems (PHS Act Sections 1202, 1203, and 1204).

- Supporting community- and school-based fluoridation programs (PHS Act Section 317).

- Supporting programs for the control of rodents (PHS Act Section 317).

- Providing for services to rape victims and for rape prevention programs (Mental Health Systems Act Section 602).

- Providing for home health services (PHS Act Section 339).

- Immunization services (including services for immunization of emergency workers against preventable occupational-exposure diseases such as hepatitis).

- Serum cholesterol control projects.

- Programs designed to reduce the incidence of chronic diseases.

- Establishing and maintaining preventive health service programs for screening, detection, diagnosis, and treatment compliance related to uterine and breast cancer.

- Provide for the payment of not more than 50 percent of the costs of purchasing communication equipment for emergency medical services systems.

The reauthorization of 1988 also expanded the requirements for the grantees to furnish additional program planning and output information to the Secretary.

This block grant is intended to eliminate duplication of effort, increase service delivery efficiency, and reduce federally-imposed burdens on the States. The funds are allocated to the States, the District of Columbia, the Territories, and eligible Indian Tribes and Tribal Organizations which apply. Each area's award is based on funds received in FY 1981 for the categorical programs consolidated into the block grant as a proportion of the total categorical awards to all States, Territories, and District of Columbia in FY 1981. The law requires that at least $3,500,000 be reserved for services to rape victims and rape prevention, which are allocated on the basis of population.

Rationale for the Budget Request

In fiscal year 1991, $83,176,000 is requested for grants, the same as the 1990 appropriation after sequestration. To continue the activities funded by this grant, $943,000 is requested for program operations. The program operations funds include $499,000 for continuing efforts to develop, implement, and replicate model programs that began in fiscal year 1990 for the reporting of activities and outcomes of programs supported by the grant. Funds are to be provided incrementally to 10 additional States each year that have the capability to develop program monitoring and reporting systems consistent with the reporting systems called for in the Year 2000 objectives. In FY 1991, the development of new systems will focus on reporting of program services delivered at the local level.

Summary of Changes

	FTE	Amount
Increases:		
Built-in increase such as pay raises effective January 1991, annualization of pay raises effective January 1990, within grades, and one extra day of pay.	---	$+25,000
Decreases:		
Scientific equipment - to absorb one-half of the pay raises effective January 1991, and other unfunded built-in increases.	---	-19,000
Net Change		$+6,000

Prevention Centers

Authorizing Legislation - Section 1706, Title XVII of the Public Health Service Act (PHS)

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Budget Authority	---	$3,949,000	---	$3,949,000	---	---

1991 Authorization......................$10,000.00

Funding levels for the past five fiscal years were as follows:

1986	1,436,000*
1987	1,500,000
1988	1,915,000
1989	1,976,000
1990	

*after sequester

Purpose and Method of Operation

Grants are made with academic health institutions to establish, maintain, and operate centers for research and demonstration for health promotion and disease prevention. These centers undertake research and demonstration projects in health promotion, disease prevention, and improved methods of appraising health hazards and risk factors, and serve as demonstration sites for the use of new and innovative research in public health techniques to prevent disease.

Rationale for the Budget Request

The Prevention Centers Program has funded the development of academic-based centers for research and demonstration in disease prevention and health promotion at the University of Washington, University of North Carolina, University of Texas at Houston, University of Hawaii, and University of California at Los Angeles. Each Center is actively engaged in a range of research and development projects and is working closely with local health agencies and health service providers to test new strategies for improving health and preventing the onset of illness. Funds have been used efficiently and effectively to produce impressive results that will have an impact on the health of different population groups including newborns, children and the elderly as well as adults with risk factors for cancer and cardiovascular disease. For example, the University of Washington Prevention Center has researched the effects of smoking cessation in people older than 55 years of age. The result of this study was published in the New England Journal of Medicine in November 1988, documenting that the benefits of smoking cessation in later years dramatically reduces the risk of heart attack or death. This is the strongest evidence yet that physicians and others should urge older smokers to quit.

Other accomplishments have been achieved at other Prevention Centers, including the University of Texas. The Southwest Center for Prevention Research at the University of Texas is focused on children's health. Draft reports are being prepared regarding national surveys of School Health in America, looking at health education, health services, food services, guidance, counseling, and school psychology. Results indicate that new policies and programs need to be developed at the State level to increase the amount and quality of health education in the schools, increase the requirements for teacher training in health education, modify the standards for school food services and physical education programs, and provide structures for coordinating school health programs. The results of this survey are being used to set health goals and objectives for the year 2000 and will be used to provide State departments of education with information that will help them plan for school health policy and program development.

The FY 1990 appropriation will fund up to three new prevention research centers and fully fund all other prevention research centers.

Sexually Transmitted Diseases

Authorizing Legislation Public Health Service Act, Section 301, 307, 310, 311, 318, and 327.

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Budget Authority:						
Grants	---	$70,666,000	---	$70,666,000	---	$---
Program Operations	164	10,640,000	164	10,754,000	---	+114,000
Total	164	$81,306,000	164	81,420,000	---	+114,000

1991 Authorization:
Grants..............................Indefinite
Program Operations..................Indefinite

* Excludes FTEs in both 1990 and 1991 for staff assigned at the request of States to assist in managing State STD prevention programs.

Funding levels for the last five fiscal years were as follows:

1986	$53,864,000
1987	$59,942,000
1988	$65,161,000
1989	$78,700,000
1990	$81,306,000

Purpose and Method of Operation

The Centers for Disease Control (CDC) utilizes two methods to provide active leadership and support for national efforts directed toward the prevention and control of sexually transmitted diseases (STD):

Project grants - Grants are awarded to State and local health departments and selected other public and nonprofit entities to support:

- Primary health promotion efforts directed toward people at risk to change high-risk behaviors, prevent exposure, and influence the infected to seek prompt medical care for themselves and their sex partners.

- Surveillance systems for the identification of STD among specific, high-risk populations.

- Surveillance and control activities directed toward antibiotic-resistance, particularly in gonococcal organisms.

- Hospital-based surveillance systems to identify patients with pelvic inflammatory disease (PID).

- Screening programs in high-risk populations to identify chlamydia, syphilis, and gonococcal infection.

- Sex partner notification and counseling services for patients with gonorrhea, chlamydia, and infectious syphilis.

- Outbreak control for syphilis, gonorrhea, chancroid, chlamydia and other STD.

- Clinical skills training for medical care providers.

- Private medical community involvement in all aspects of STD control.

Program operations - The CDC provides active leadership and support for activities which can be accomplished only at the national level or which are most cost-effective to perform centrally rather than being duplicated in each State and territory. CDC's in-house staff are available to:

o Provide STD technical assistance and consultation to State and local health departments in:

  - Planning, implementing, and monitoring STD control efforts.
  - Improving diagnostic techniques and clinical care.
  - Conducting research studies and demonstrations.
  - Developing management information systems.
  - Training STD public health personnel.
  - Providing epidemic assistance and disease information.

o Serve as national focus for identifying and actively investigating special STD control problems. This includes:

  - Monitoring penicillin resistance of gonococci and testing strains of PPNG for resistance to other antibiotics.
  - Standardizing and monitoring the performance of laboratory testing for resistant gonorrhea.
  - Assisting in investigations of STD outbreaks.
  - Serving as a reference laboratory for diagnostic tests for STD in problem situations.

o Conduct surveillance, behavioral, and epidemiologic research related to STD, such as:

  - Maintaining systems for surveillance of unusual STD incidence.
  - Defining the problem of chlamydial infection and seeking public health applications for existing and new technologies.
  - Monitoring the long-term teratogenicity of oral acyclovir, as well as evaluating alternative diagnostic techniques for genital herpes.
  - Identifying risk groups and alternative treatment regimens for human papillomavirus.
  - Identifying behavioral risk factors for HIV and STD.

A Summary of activity in syphilis, gonorrhea and chlamydia follows:

Reported Morbidity Levels:

	1987	1988	1989*
Gonorrhea......................	830,061	732,957	751,100
Resistant gonorrhea............	22,779	32,400	52,600
Infectious syphilis............	33,831	39,244	43,989
Congenital syphilis............	367	672	925

* Estimated

- Syphilis - In FY 1989, 43,989 cases of primary and secondary syphilis were reported, reflecting an increase of 12.1 percent from FY 1988 figures. This represents the highest number of reported cases since 1948! The increases over the past three years have been associated with hard-to-reach foci of disease among "crack" cocaine users who are exchanging sex for drugs. Demographically, all of the increase in primary and secondary syphilis has occurred in low income, inner-city, heterosexual minority populations. Rates are 31 times higher among blacks than whites and 11 times higher among Hispanics than whites. These are the same groups that are at high-risk of HIV infection associated with IV drug abuse. Because of this association, it is important to ensure that HIV prevention activities support syphilis control activities. In addition to STD grant funds, the funds devoted to HIV prevention and education activities will also have a positive impact on changing the sexual behaviors of the populations at high risk of this and other sexually transmitted diseases.

  The rise of primary and secondary syphilis in heterosexual populations since FY 1987 forewarned of congenital syphilis increases in future years. The magnitude of the increases, however, has continued to be larger than expected. Reported infant congenital syphilis cases increased to 925 in FY 1989, a 37 percent increase over the 672 cases reported in FY 1988. However, even these figures are underestimates since only overtly symptomatic infants have been reported. The increase reflects both the rise in heterosexual syphilis and the lack of utilization of health care services, particularly prenatal care services, by mothers of infected infants. Development of new methods to reach the core of women who do not receive prenatal care, as well as intensive application of early syphilis intervention techniques, are CDC priorities for FY 1990 and 1991.

- Gonorrhea: Federally-assisted State and local gonorrhea control programs were implemented in 1972. Annual increases in reported cases began to slow from FY 1973 until FY 1976. From FY 1976 through FY 1981, the number of reported cases stabilized and the rates declined. Since 1981 cases of gonorrhea have decreased by almost 34 percent. However, gonorrhea continues to be the number one reportable disease in the United States. Unfortunately the decline in reported cases that had been occurring over the last several years has been reversed as morbidity increased during FY 1989 for the first time in four years. Reported morbidity increased by 1.5 percent to an estimated 751,100 cases, and a case rate of 308 per 100,000. Male cases increased by 3.2 percent and female cases increased by 1.5 percent. However, the total number of cases is still less than 800,000 for the second consecutive year.

Twenty-two states had a higher gonorrhea rate in 1989 compared to 1988. Five states reported increases of 4,000 or more cases. While some of the increase is artifact (the result of a case reporting review and subsequent adjustment), it is also clear that a substantial portion is true increase. Intensive surveillance will continue to closely monitor these increases. The ratio of benefits to costs for gonorrhea prevention activities still remains high at almost 2.9:1.

- Chlamydia - National policy guidelines for prevention and control of chlamydial infections, which cause about four million acute infections annually, were developed in 1985 and updated in the STD Treatment Guidelines of 1989. Since 1985 STD control programs have made substantial advances in the development of prevention and control programs for chlamydia. Currently, 42 States have at least one city or county STD program that offers comprehensive surveillance, diagnostic, testing, and treatment services. Thirty-three States also have laws or regulations requiring the reporting of chlamydia.

Results of FY 1989 Prevention/Outreach Activities:

	Infectious Syphilis	Gonorrhea	Chlamydia
Persons Tested.................	217,182	6,100,000	1,810,000
New Persons Examined..........	117,773	496,500	315,100
New Cases Detected............	19,820	254,000	267,700
Persons Preventively Treated..	45,948	144,800	29,900
Potential Cases Prevented.....	12,400	181,700	80,200

At the national level, CDC continues operational and behavioral research activities which include:

- The association of syphilis infection with crack cocaine usage.
- The role of prostitution in the transmission of STD and HIV.
- Patterns of repeat infections and co-occurrence of other STD within the same individuals.
- Gender differences in behavioral and demographic risk factors for gonorrhea.
- Analysis of continuous exposure patterns among patients with genital lesions.
- Evaluation of emergency room screening procedures for STD.
- Analysis of unusual complications of syphilis in HIV infected persons.
- Analysis of stillbirths associated with untreated maternal syphilis.
- Development of a sentinel surveillance system for chlamydial infections analogous to HIV Family of Surveys.
- Analysis of factors associated with STD-related infertility.
- Analysis of cervical cancer mortality trends to define relationships of STD to cervical cancer.
- Determining the prevalence of HPV infections in different socioeconomic groups.
- Monitoring the teratogenicity of acyclovir.

Rationale for the Budget Request

The STD program is required to protect this Nation's ability to continue to prevent and control what is, collectively, the largest communicable disease problem that it faces. Over 12 million cases of STD occur annually in the form of 20 diseases and 25 syndromes, many of which have recently achieved prominence because new diagnostic approaches have facilitated determining their extent, method of transmission, and clinical consequences.

An estimated 8 million persons, primarily adolescents and young adults, are expected to attend STD clinics for services in FY 1991, resulting in the treatment of more than 600,000 gonorrhea, chlamydia, and syphilis patients and other suspects.

- Project grants - The budget request for FY 1991 includes $70,666,000 for STD Grants to States, the same level appropriated for FY 1990. These funds will maintain efforts to:

  - Implement innovative education, screening, and partner notification methods to control the substantial increases in infectious and congenital syphilis experienced since FY 1987. Emphasis will be focused on the top 34 morbidity-producing counties in the U.S.

  - Continue the development and implementation of sentinel surveillance, screening, education and partner notification programs for chlamydial control.

  - Continue prevention and control programs for gonorrhea, with special emphasis on surveillance for resistant strains and prevention of severe complications such as PID.

  - Support 11 geographically dispersed STD Prevention/Treatment Centers for the education of health care providers. These Centers create a nationwide network of resources for STD--training more than 2,500 clinicians each year; setting high standards of clinical care; and researching new control diagnostic and therapeutic modalities.

- Program operations - A total of $10,754,000 is requested in FY 1991, the same level appropriated for FY 1990, for CDC's in-house STD program support activities. Program operations will include funding for: technical assistance to State and local health departments, other agencies and private organizations/individuals; cooperative agreements and contracts; in-house behavioral and applied research; planning and evaluation of activities to assure maximum benefit from resources allocated. This level of funding will also continue comprehensive lifetime medical care and burial expenses for the remaining former participants in the Tuskeegee Syphilis Study, and claims of their wives/widows, or offspring determined to have suffered injury or disease from syphilis contracted from the study participant.

Summary of Changes

	FTE	Amount
Increases:		
Program Operations -		
Built-in increase such as pay raises effective January 1991, annualization of pay raises effective January 1990, within grades, FICA, FERS. one extra day of pay, and ADP Computer Center	---	$610,000
Decreases:		
Program Operations -		
Scientific equipment- to absorb 50% of FY 1991 pay raises and other unfunded built-in increases	---	-496,000
Net Changes	---	+$114,000

Immunization

Authorization Legislation - Section 301, 307, 310, 311, 317 327, and 352 of the Public Health Service Act (PHS)

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Budget Authority:						
Grants	---	$130,080,000 /1	---	$130,862,000	---	+$782,000
Program Operations	169	21,742,000	169	21,860,000	---	+118,000
Vaccine Stockpile	---	2,961,000	---	---	---	-2,961,000
Total	169	$154,783,000	169	$152,722,000		-$2,061,000

1991 Authorization:
Grants.................Authorization expires September 30, 1990, an extension is pending.
Program Operations....................Indefinite

/1 Reflects proposed reprogramming of $1.4 million from Immunization-parent/patient notification to Health Statistics.

Funding levels for the last five fiscal years were as follows:

1986	$56,876,000
1987	$87,361,000
1988	$98,198,000
1989	$141,964,000
1990	$154,783,000

Purpose and Method of Operation

Appropriate administration of safe and effective vaccines remains the most cost-effective method of preventing human suffering and reducing economic costs resulting from vaccine-preventable diseases. The Public Health Service has established immunization as one of the 15 objectives which would significantly reduce or prevent unnecessary morbidity and mortality.

The goals of the immunization program are to eliminate indigenous wild-virus poliomelitis (polio), measles, rubella, and congenital rubella syndrome (CRS); to substantially reduce the health burdens caused by mumps, childhood menigitis, diphtheria, pertussis, and tetanus in the United States; and beginning in 1990, to reduce the perinatal transmission of hepatitis B.

The Centers for Disease Control (CDC) uses two methods to provide active leadership and support for national efforts to prevent and/or control vaccine-preventable diseases:

- Project grants - Since 1963, CDC has provided project grant support to assist State and local health agencies in planning, developing, and conducting childhood immunization programs. The grant program is aimed at achieving the 1990 objectives for immunization which are to: reduce morbidity and mortality due to vaccine-preventable diseases; achieve and maintain interruption of indigenous measles transmission; maintain 95 percent immunization levels for school children under age 15 against measles, poliomyelitis, diphtheria, tetanus, and rubella; maintain 95 percent immunization levels for school-enterers and children enrolled in licensed child care centers against measles, poliomyelitis, diphtheria, tetanus, pertussis, rubella, and mumps; and develop, test, and implement systems for use in the States to ensure that 90 percent or more of all children complete basic immunizations by age 2. In FY 1991, public support for the purchase of Haemophilus influenzae b vaccine for use in the public sector, as well as the other vaccine-preventable diseases noted above, will continue.

- Program operations - Selected activities can either be accomplished only at the national level or can be performed more cost-effectively at the national level. These activities are accomplished by cooperative agreements, contracts, in-house research, technical assistance, planning and evaluation, and include: developing national goals and strategies forthe prevention and control of vaccine-preventable diseases for both children and adults; providing technical assistance and consultation in management practices and program operation methods; evaluating State and local immunization programs; maintaining a stockpile of vaccine in the event of disruption of the supply of vaccine; maintaining a mechanism for saving millions of dollars annually by the consolidated purchase of vaccine for States and local agencies; providing national surveillance and prompt epidemic assistance in the investigation and control of outbreaks of measles and other vaccine-preventable diseases; providing laboratory reference services; conducting surveillance and investigation of vaccine reactions and vaccine failures; rapidly identifying problems with safety of vaccines through monitoring of adverse events following vaccination and special studies; developing recommendations for the appropriate use of vaccines; assessing national immunization levels; facilitating laboratory proficiency testing; conducting studies and investigations to determine the safety, efficacy, and appropriate use of new and presently used vaccines; and conducting demonstrations of different interventions which can increase immunization levels of preschool-aged children who live in low-income, inner-city areas of the Nation.

Rationale for the Budget Request

Resources requested for 1991 will be used to continue the efforts of official health agenices in all 50 states, 12 areas and Territories to ensure the immunization of preschool children, prevent the build-up of new pockets of susceptible children, and eliminate measles, rubella, and congenital rubella syndrome from the U.S. Major goals for 1991 related to the vaccine-preventable disease are to: maintain the high immunization levels of children entering school, which are currently 98 percent; increase age-appropriate immunization levels of preschool children; reduce the incidence of Haemophilus influenzae b (hib); reduce the perinatal transmission of hepatitis B; control outbreaks of measles; maintain surveillance and continue research on the safety, efficacy, and appropriate use of vaccines; and increase the appropriate immunization of adults. States and communities will continue to be urged to broaden immunization requirements to include entry into college. Increasing State and local support will also be necessary for the essential activities of surveillance, investigation, and program coordination.

In spite of the increases in the price of vaccines since 1982, immunization programs still have had a high benefit-cost ratio. For example, the benefit-cost ratio of measles, mumps and rubella vaccine is estimated to be over 14:1 (American Journal of Public Health, July 1985, 75:7), and the benefit-cost ratio for polio immunization remains over 10:1 (Journal of Investigative Dermatology 61:321). This translates to an estimated savings of approximately $1 billion per year for polio, and $500 million per year for measles. In addition, it is estimated that for the period 1963-1989 over 71 million cases of measles and 23,100 cases of mental retardation have been averted and 7,100 children's lives have been saved, because of measles immunizations.

Grants

In FY 1991, $130,862,000 is requested to continue the grant program. These funds will purchase the same number of doses of measles, rubella, mumps, polio, diphtheria, tetanus, pertussis and Hib vaccine. This maintains the 1990 level for the purchase of vaccine which includes the projected cost of the excise tax placed on vaccines by Public Law 100-203 enacted to fund the National Vaccine Compensation Program. Requested funds will allow the purchase with grant funds of 12.7 million doses of measles, mumps and rubella (MMR) vaccine and polio vaccine; 3.5 million doses of DTP; and 1.9 million doses of Hib Vaccine.

This funding level for Immunization grants includes $19,186,000 in support for State operations. These activities are essential to the conduct of an effective immunization program. In addition to the purchase of vaccine, States must distribute and administer the vaccines, assure proper procedures are in place for various population groups, develop and maintain systems to detect adverse events following vaccination, and provide professional educational materials about the importance of vaccination, such as education of new mothers, and recall patients for future immunizations to assure vaccination is completed at the appropriate age.

This request also includes $7,897,000 in grants and $2,463,000 in program operations to continue a public sector screening and immunization program to reduce the perinatal transmission of Hepatitis B which was initiated in 1990. This will support the public sector screening of over 1,000,000 pregnant women for Hepatitis B and immunize approximately 8,700 infants born to infected carrier mothers.

This request also includes $7,881,000 in program operations to continue activities initiated in 1990 to improve our Nation's capacity to deliver vaccines at the appropriate age, particularly to hard-to-reach populations in large inner-city areas. These activities will improve our measurement of actual immunization levels in defined populations so that unvaccinated children can be identified and program changes made to better reach these children, improve health care provider compliance with the recommended policies and procedures known to be effective in raising coverage levels, create increased parental interest in and demand for immunizations in the first two years of life, and increase our understanding of the key reasons for non-vaccination in some segments of our population.

The request does not include funds to increase the vaccine stockpile. It is estimated that by the end of FY 1990 the stockpile will contain or have on order approximately a twenty-three week supply of MMR, OPV, DTP, Td, DT, and IPV Vaccines. During the coming year we can better assess the impact that Public Law 99-660, The Vaccine Compensation Act, has had on the price and availability of vaccine. This legislation should provide manufacturers of childhood vaccines with greater security concerning liability risks. It is expected that additional vaccine manufacturers will enter the market and that vaccine prices would then decrease because of increased competition. Savings realized from decreased vaccine prices could then be used to purchase vaccine from the stockpile.

The request provides funds to continue the requirements mandated by sections 2125 and 2126 of Public Law 99-660 the National Vaccine Injury Compensation Program.

Section 2125 mandates that each health care provider and vaccine manufacturer shall report to the Secretary, the occurrence of any adverse event set forth in the Vaccine Injury Table. A mechanism initiated in 1989 to insure the prompt collection of accurate adverse events from both the public and private sector, storage of reports, retrieval of reports for use, analysis of data, and the production of summary reports will be continued at a cost of $2,531,000. CDC and FDA are jointly initiating a contract to accomplish this function.

Section 2126 mandates that "not later than 1 year after the effective date of the legislation, the Secretary shall develop and disseminate vaccine information materials for distribution by health care providers to the legal representatives of any child receiving a vaccine set forth in the Vaccine Injury Table. Drafts of such materials were published in the Federal Register and are being revised." Three separate forms are under development - one each for DTP (and its components), MMR (and its components), and polio vaccines.

These will be provided in camera-ready form to State Health Departments, who will print and distribute them to all vaccine providers in the public sector. Camera-ready copies will also be provided to providers in the private sector. Translations into Spanish, French, Chinese, and Vietnamese will be provided. The annual development and translation costs are estimated to require $3,000,000 per year.

This request also continues the 1990 provision of $2,926,000 to assist those States who manufacture their own vaccines on which the vaccine excise tax was placed.

Activities break of Immunization funding:

Grants:	FY 1990	FY 1991	Change
Vaccines	$86,667,000	$87,982,000	+$1,315,000
State Operations	18,641,000	19,186,000	+545,000
Measles	9,871,000	9,871,000	0
Hepatitis b	7,897,000	7,897,000	0
Parent/Patient Notification	4,078,000	3,000,000	-1,078,000
Excise Taxes for State Manufactured Vaccine	2,926,000	2,926,000	0
Total Grants	$130,080,000	$130,862,000+	$782,000

CDC Program Operations:

Base program operations	$8,374,000	$8,492,000	+118,000
Measles Outbreaks	493,000	493,000	0
Hepatitis b	2,463,000	2,463,000	0
Infant initiative	7,881,000	7,881,000	0
adverse events	2,531,000	2,531,000	0
Total Program Operations	$21,742,000	$21,860,000	+$118,000
Vaccine Stockpile	$2,961,000	$0	-2,961,000
Total Immunization	$154,783,000	$152,722,000	-$2,061,000

The following morbidity patterns in reported cases have been observed since 1977:

Year	Measles	Rubella	Mumps	Pertussis	Tetanus	Polio+	Diphtheria
1977	57,345	20,395	21,436	2,177	87	20	84
1978	26,871	18,269	16,817	2,063	86	8	76
1979	13,597	11,795	14,225	1,623	81	22	59
1980	13,506	3,904	8,576	1,730	95	9	3
1981	3,124	2,077	4,941	1,248	72	9	5
1982	1,714	2,325	5,270	1,895	88	11	2
1983	1,497*	970	3,355	2,463	91	12	5
1984	2,587	752	3,021	2,276	74	9	1
1985	2,822	630	2,982*	3,589	83	8	3
1986	6,282	551	7,790	4,195	64	8	0*
1987	3,655	306	12,848	2,823	48*	6	3
1988	3,396	225*	4,866	3,450	53	9	2
1989**	14,714	369	5,346	3,597	45	***	2

+ Paralytic polio case count based on medical consultant record reviews of cases reported to CDC, 1975-1987.
* Record Low
** Provisional data through 12/16/89.
*** Results of medical consultant review not yet available.

Summary of Changes

Increases:	FTE	Amount
Built-in increase such as pay raises effective January, 1991, annualizations of pay raises effective January 1990, within grades, FICA, FERS, one extra day of pay. and computer center	---	+530,000
Grants - vaccine cost	---	+1,315,000
Grants - state operations	---	+545,000
Decreases:		
Grants - non-recurring parent/patient notification	---	-1,078,000
Vaccine stockpile	---	-2,961,000
Equipment -		
Absorption of 1/2 of pay raises effective January, 1991, and other unfunded built-in increases	---	-412,000
Net Change:		-2,061,000

Infectious Diseases

Authorizing Legislation - Sections 301, 307, 310, 311, 317, 327, 352, and 1102 of the Public Health Service Act (PHS).

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Other Infectious Diseases	530	$39,643,000	530	$40,512,000	---	$+869,000
TB Grants	---	8,443,000	---	8,443,000	---	---
Total, Infectious Diseases	530	$48,086,000	530	$48,955,000	---	$+869,000

1991 Authorization:

TB Grants....................Section 317 is pending reauthorization.
Others.......................Indefinite

Funding levels for the last five fiscal years were as follows:

1986	$40,066,000
1987	$43,694,000
1988	$43,767,000
1989	$48,077,000
1990	$48,086,000

Purpose and Method of Operation:
CDC's efforts in infectious disease prevention are focused on:

- o Research to develop new or improved diagnosis, prevention and control methods and techniques.
- o Working with States and local health departments and private health care providers to transfer and accelerate the general application of accepted prevention technologies.
- o Maintaining a capability to respond to outbreaks of many diseases that seldom occur.

Rationale for Budget Request:
These activities complement epidemic services and provide a major aspect of the public health base which is vital to CDC's emergency response. The FY 1991 level of activity will be essentially the same as 1990. The major areas of concern supported by this activity include hospital infections, hepatitis B, bacterial meningitis, pneumococcal disease, enteric diseases, and tuberculosis. Background on these diseases and planned activities are as follows:

- o Hospital Infections ($2,787,000 and 54 FTEs)

  Nosocomial (hospital-associated) infections are estimated to occur in 5 percent of all patients admitted to U.S. hospitals, thus accounting for approximately two million nosocomial infections per year. However, the estimated incidence may reach as high as 15 percent or more in some individual hospitals. A unique feature of nosocomial infections is that, amid the rapidly increasing technological complexity of the hospital environment, the risk factors that strongly predispose patients to infection are constantly changing. This necessitates constant surveillance at the hospital and national levels to identify new risks as they occur.

The major activities to be carried out are:

- Expand the data base on nosocomial infections.
- Determine the morbidity and mortality associated with nosocomial infections caused by antimicrobial resistant bacteria.
- Determine the incidence of infections caused by selected nosocomial pathogens and the extent to which antimicrobial resistance is emerging.
- Identify risk factors associated with infections in pediatric ICU's.
- Define risk factors and identify future priorities for infection control in skilled nursing facilities.

- Hepatitis B ($1,325,000 and 11 FTEs)

An estimated 300,000 new hepatitis B infections occur in the U.S. per year, requiring 60,000 hospitalizations, resulting in 4,000 deaths per year, and resulting in direct medical and work loss costs of over $350 million per year. In 1987, the annual incidence of hepatitis B infections was estimated at 63.5 cases per 100,000 population. Current efforts at prevention rely on the highly effective hepatitis B vaccine which is currently targeted at high-risk segments of the population, such as health care workers, homosexual men, the institutionalized mentally retarded, and intravenous drug users. Perinatal transmission of HBV results in a high rate of infection and 90 percent of infants infected at birth become chronically infected with HBV.

The major activities to be carried out are :

- Continue to define national hepatitis B trends; assess prevalence of HBsAg and predictors of positivity among prenatal women to better define parameters for preventing HBV transmission.
- Obtain incidence, prevalence, and cost data on cases of chronic HBV and sequelae from a defined, general U.S. population base.
- Continue with HBV and AFP screening in Alaskan Natives
- Continue long-term follow-up of HBV vaccine in high risk populations to determine rate and nature of infection.
- Determine what factors influence the acceptance of vaccination by high risk groups.
- Facilitate the licensure of new low cost vaccines in order to make prevention of hepatitis B more attainable.

Bacterial Meningitis ($187,000 and 3 FTEs)

Bacterial meningitis is a life-threatening infection of the central nervous system. Approximately 15,000-20,000 cases occur annually in the U.S., caused predominantly by *H. influenzae*, *N. meningitis*, *S. pneumoniae*, and group B streptococci. Neonates and the elderly are at greatest risk.

H. influenzae infections are major causes of pediatric morbidity and mortality with an estimated 12,000 cases of meningitis and 500 deaths annually. In addition to meningitis, an approximate equal number of persons have other forms of invasive H. influenzae type b (Hib) disease: pneumonia, cellulitis, osteomyelitis, septic arthritis, and epiglottitis. More than 95 percent of all invasive disease occurs in children less than 5 years of age and greater than 50 percent occurs in children less than 18 months of age. Mortality from Hib meningitis is 5-10 percent, and the morbidity among survivors is substantial with approximately 25 percent having residual seizures, retardation, deafness or learning disability. Children in child care centers are at increased risk of primary H. influenzae disease. Of all of the population groups studied in the U.S., the Alaskan Eskimos has the highest incidence of Hib disease.

The major activities to be carried out in 1991 are highlighted as follows:

- Develop antibody assays and animal models to determine the basis for vaccine protection.
- Develop ACIP recommendations for prevention of secondary Hib disease.
- Continue to develop strategies for use of Hib vaccine.

Pneumococcal Disease ($301,000 and 6 FTEs)

An estimated 150,000 to 570,000 cases of pneumococcal pneumonia occur each year in the United States; however, diagnosis of the disease is hindered by the lack of sensitive and specific laboratory tests. Pneumococcal bacteremia occurs in one-third to one-fifth of patients with pneumococcal pneumonia. Pneumococcal isolates partially and totally resistant to penicillin are being recognized with increased frequency.

Two 23-valent pneumococcal vaccines are available in the United States, but they are under-utilized in high-risk populations. Continued emphasis will be placed on improved vaccine delivery to high risk persons, monitoring trends in antimicrobial resistance patterns and development of better diagnostic tests for use in serum and sputum.

The major activities to be carried out are:

- Evaluate the incidence of pneumococcal disease and vaccine utilization
- Continue to monitor the serotypes and antimicrobial resistance patterns of pneumococci causing serious infections
- Evaluate the efficacy of the new 23-valent vaccine by monitoring the serotype distribution of disease-causing strains in persons receiving the vaccine in this country
- Evaluate new pneumococcal vaccines in selected high-risk populations and regions of Alaska.

- **Enteric Diseases** ($1,663,000 and 58 FTEs)

Viral, bacterial, and parasitic enteric diseases are a major cause of morbidity and mortality in the U.S. and in developing countries. In the U.S. there are 30,000 to 50,000 pediatric hospitalizations for acute viral gastroenteritis; and, in children under 5 years of age in Africa, Asia and Latin America, there are an estimated 1 billion cases of acute gastroenteritis with 5 million deaths. Rotavirus accounts for 30-50 percent of pediatric hospitalized cases and 10-25 percent of pediatric outpatient cases in developed countries and approximately 20 percent of cases in developing countries. Rotavirus vaccines, recently developed and presently being tested in clinical trials, provide the opportunity to prevent cases of rotavirus associated gastroenteritis. The etiology of 30-50 percent of cases of acute gastroenteritis remains unknown.

The bacterial enteric diseases cause an estimated 70 million cases of illness (29,917 per 100,000 population) and 7,000 deaths per year in the U.S.

The three principal protozoan enteric diseases are amebiasis, giardiasis, and cryptosporidiosis. Collectively, these parasites affect an estimated 4 million Americans. The prevalence is generally higher, and the disease is generally more severe, in children.

These diseases are a significant problem in day-care centers. The objective for the Year 2000 is to reduce by 25 percent the annual incidence of infectious diarrhea acquired by children in licensed child care centers (as of this writing, baseline data is unavailable). In the U.S., the costs of diagnostic tests, hospitalization, drug therapy, and loss from work, are estimated to be over $120 million. E. histolytica and Cryptosporidia pose difficult diagnostic problems. The present lack of knowledge of strain virulence requires that all E. histolytica infections be treated, irrespective of symptoms. No drug has been found that is safe and effective for treating cryptosporidiosis.

The major activities to be carried out are:

- Study the agents and epidemiology of viral enteric diseases in children and adults; evaluate the role that viruses play in enteric diseases of unknown etiology
- Evaluate the agents and prevention strategies for diarrheal diseases in child-care centers
- Determine the prevalence, causes, and importance of antimicrobial resistance in Salmonella and Shigella
- Improve and evaluate laboratory methods for isolation, identification, and characterization of bacterial enteric pathogens
- Identify and evaluate strain differences in parasitic protozoa.
- Develop more sensitive and specific tests for detection of protozoal diseases; and investigate outbreaks of enteric diseases.

- *Lyme Disease* ($2,000,000 and 6 FTEs)

Lyme disease is one of the most important emerging infectious diseases of this decade, the number of reported cases increasing nearly fivefold from 1982 to 1987 (492 to 2368) and doubling from 1987 to 1988 (4572 cases). Lyme disease reporting increased from 11 states in 1980 to 43 states in 1988. Media coverage of Lyme disease is surpassed only by that of AIDS. Numerous commercial test kits of uncertain specificity and sensitivity have been marketed. Because a definitive diagnostic test is lacking, however, there has been considerable medical and public confusion.

Lyme disease is a tick-transmitted, acute and chronic bacterial infection The acute illness readily responds to appropriate antibiotic therapy. Untreated or improperly treated, Lyme disease can progress to chronic sequelae such as arthritis or neurologic and cardiac disorders which require more intensive therapy.

Three species of *Ixodes* ticks have been associated with Lyme disease transmission in the United States. The most important vector, *Ixodes dammini*, occurs throughout the northeastern and upper mid-western states. *Ixodes scapularis* may be an important vector species in the southeast, and *Ixodes pacificus* transmits the disease in the Pacific coastal states. The tiny (2mm) nymphal stage of *I. dammini* appears to be the most important source of human infection. *Borrelia burgdorferi* has been isolated from other tick species in nature, some of which have been shown to be competent vectors in the laboratory. There is a paucity of data on the biology, ecology and behavior of ticks, which makes it difficult to devise control strategies.

The major activities to be carried out are:

- Develop national surveillance programs for Lyme disease.
- Develop improved laboratory diagnostic procedures to increase accuracy of clinical diagnosis.
- Implement control strategies, including trials to determine the effectiveness of repellents and other personal protective measures in reducing the risk of acquiring Lyme disease.

- *Tuberculosis* ($8,443,000 and 47 FTEs)

CDC provides leadership coordination, and technical assistance targeted toward eliminating tuberculosis from the United States through the implementation of a three-step plan:

- Intensification - more effective application of known prevention and control measures.
- Research - modern technical and biotechnical research efforts to develop more effective tools to prevent and control the disease and
- Technology Assessment and Transfer - rapid and effective assessment of new prevention and control technologies and transfer into clinical and public health practice.

In FY 1990 and 1991, support will continue for cooperative agreements targeted to the Nation's inner cities where most of the tuberculosis morbidity occurs. Most of the funds are used to hire outreach workers whose major responsibility is to provide follow-up and directly-observed therapy (DOT) for approximately 10 percent of patients who would be otherwise noncompliant and a continued public health threat. Tuberculosis requires 6 - 9 months of therapy in a compliant patient and longer durations in persons who do not faithfully take their medications. Some health departments have reported a savings in hospital costs of $3 to $4 for each $1 spent for directly observed therapy.

Summary of Changes

Increases:	FTE	Amount
Built-in increases such as pay raises effective January 1991, annualization of pay raises effective January 1990, within grades, FICA, FERS, one extra day of pay, ADP Computer Center, GSA rent, and PHS Service and Supply Fund....................	---	+$2,633,000
Decreases:		
Equipment- absorption of 1/2 of the pay raises effective Jauary 1991, and other unfunded built-in increases....................................	---	-1,764,000
Net Change	---	+$869,000

Chronic and Environmental Disease Prevention

Authorizing Legislation - Sections 301, 307, 310, 311, 327, 352, 394, and 1102 of the Public Health Service Act (PHS).

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Other Chronic & Environmental...	628	$77,163,000	628	$78,973,000	---	+$1,810,000

1990 Authorization.................................. Indefinite

Funding levels for the last five fiscal years were as follows:

1986	$29,064,000
1987	$31,000,000
1988	$45,158,000
1989	$65,681,000
1990	$77,163,000

Purpose and Method of Operation

Significant premature death, and preventable illness and disability, are caused by personal behavior choices leading to chronic diseases, by nonoccupational injuries, and by exposure to man-made and naturally-occurring environmental hazards. The major chronic diseases, such as cardiovascular disease, cancer, chronic lung disease, and diabetes are the leading causes of premature death and long-term disability in the United States, resulted in over 1.3 million deaths and over 3.6 million years of potential life lost (YPLL) in 1986. Birth defects are the fifth leading cause of YPLL and in 1986 were the single greatest cause of infant mortality. Prevention offers the major challenge and opportunity for averting a substantial portion of this unnecessary illness and death.

The principal means for achieving prevention objectives include: Surveillance and epidemiologic studies; development and application of laboratory technology to test for hazardous substances in human tissues, and the effects of exposure to environmental hazards as well as to improve diagnostic methodology for early detection of chronic diseases; research to determine adverse health effects of environmental and other hazards, and to improve the precision of measurements associated with complex behaviors; intervention development, with emphasis on primary prevention and health promotion strategies and techniques; provision of a wide range of epidemiologic, laboratory, and management consultation and training services to State, local, international, and other health professionals.

The CDC applies its expertise in problem identification, intervention development and application, State capacity-building, technology transfer, and program evaluation to address; the prevention of chronic disease, the reduction of premature death and disability associated with tobacco use, the prevention of birth defects and developmental disabilities, the prevention of child and adult death and disability resulting from injuries and trauma sustained outside the workplace, the prevention and control of disabilities, and the prevention of environment-related diseases.

Rationale for the Budget Request

In FY 1991, $78,973,000 is requested for CDC's chronic and environmental disease activities, with emphasis on research, development, and implementation of prevention strategies designed to improve the health and quality of life of the American people. In FY 1990 and 1991 funds will be used to support projects related to these prevention and control strategies and will include:

Chronic Disease Surveillance, Prevention, and Control Risk factors for chronic disease having their roots in modifiable health behaviors will be targeted. Such risk factors include smoking, excessive dietary fat consumption, and lack of physical activity. In 1991, chronic disease funds will be used to develop and deliver effective interventions to address these risk behaviors. Strong coalitions with physicians' groups, schools, voluntary health agencies, and others will be forged to foster an integrated and comprehensive approach to reducing these preventable health problems. Particular attention will be paid to chronic disease prevention in minorities and other currently underserved groups.

In 1991, CDC will continue funding assistance to selected State health departments to enable them to enhance the planning and implementation of chronic disease prevention and control activities. Through these efforts, CDC has been able to document specific increases in the State's capacity to establish planned programs to reduce the health burden associated with chronic disease. New, State-based prevention programs are in place which target breast and cervical cancer screening and follow-up, blood pressure and cholesterol screening, smoking prevention and cessation, increased physical activity, reduction of dietary fat intake, control of diabetes, and the formulation of prevention policies.

Funding is also being used to build the capacity of States to track preventable chronic diseases and their modifiable determinants. State-specific estimates of the behavioral health risks associated with major chronic diseases are needed for planning interventions and monitoring trends. To address this need, CDC established the Behavioral Risk Factor Surveillance System which is now active in 45 States and the District of Columbia.

Chronic Fatigue Syndrome - The CDC continues to provide laboratory support for various Chronic Fatigue Syndrome projects located throughout the U.S. In 1991, $1,233,000 is included for this activity.

Smoking and Health - The Office on Smoking and Health serves as the focal point for all Federal government activities related to smoking and health. The FY 1991 request includes $3,421,000 for efforts to reduce the enormous health and economic burden related to tobacco use. Specific activities include: public information and education campaigns designed to encourage smokers to quit and to discourage the uptake of smoking, especially among adolescents; collection and dissemination of scientific and technical information related to smoking and health; epidemiologic studies on the prevalence of tobacco use and factors that lead to its use; technical and epidemiologic assistance to the States; and coordination of smoking and health activities within the Department.

Cardiovascular Disease - Cardiovascular disease resulted in over 760,000 deaths and nearly 1.5 million YPLL in 1987. To have a widespread impact on reducing cardiovascular disease (as well as other preventable chronic diseases) in the United States, we are replicating lessons learned from several major community trials using community-based approaches to reducing modifiable behaviors that place individuals at increased risk for disease. In 1991, approximately $5,000,000 is included for these activities.

Breast and Cervical Cancers - It is estimated that 43,000 women died from breast cancer and 6,000 from cervical cancer in 1989. The key to reducing illness and death from these cancers is early detection and treatment. We must increase the number of women who are screened for breast and cervical cancer, ensure the accuracy of screening tests (mammography, pap smear), and provide timely and effective interventions.

In 1991, $4,926,000 will continue to support State health department efforts which build on activities funded in FY 1990 to establish a national focus for effective breast and cervical cancer prevention and control programs. This includes initiation of comprehensive screening programs in selected States and establishment of key program elements as a base upon which to build a strong national program. These include information/education programs for women, education campaigns for health care professionals, quality assurance mechanisms, and augmented surveillance systems.

Diabetes - Diabetes remains one of the leading causes of death and major medical complications (e.g., lower extremity amputations, kidney failure, and blindness among adults), especially among minority populations. Diabetes mellitus accounts for more than 125,500 years of potential life lost each year and total costs are estimated at $20 billion a year.

The CDC has been designated as the lead Federal agency for translating diabetes research into optimum care for our nation's 7 million diabetics. FY 1991 $7,156,000 funding will: continue to support State programs; implement innovative intervention strategies, with emphasis on blacks, Hispanics, Native Americans, and Asian/Pacific Islanders; establish and conduct ongoing surveillance of diabetes mortality and morbidity, and community epidemiologic investigations of preventive interventions.

Comprehensive School Health Education - The CDC's school health education program provides assistance to State and local education agencies to improve the health of children and adolescents by reducing their health risks related to injuries, HIV and STD infection, cardiovascular diseases, cancer, drug abuse, and other health problems. Most behaviors associated with chronic diseases are established during the school-aged years and prevention through effective school-based intervention can have a significant, long-term payoff to the nation's health. In 1991, approximately $500,000 is included for these activities.

Hazardous Substances - In 1991, approximately $2,000,000 is included for efforts directed toward health studies about relationships between environmental exposures and health outcomes and on developing, evaluating, and applying new laboratory technologies to detect and quantify substances in humans and to assess potential human health effects of toxicant exposures.

Hanford Thyroid Disease Study - Pursuant to PL 100-607, CDC is conducting a study of thyroid morbidity of the population in the vicinity of Hanford, Washington, during the years 1944-1957. CDC has awarded a contract for and will collaborate in a pilot study and, if feasible, a epidemiologic study of thyroid disease in FY 1991. $1,862,000 is included for this activity.

Lead Poisoning Prevention - In 1991, $3,949,000 will continue CDC's funding of childhood lead poisoning prevention programs in areas with high prevalence of this disease. These programs will result in screening of tens of thousands of children at risk for adverse effects from lead and referrals for medical and environmental follow-up. CDC, along with HUD and local agencies, will seek to ensure effective abatement of homes of children identified with elevated lead levels and will fund educational programs on childhood lead poisoning.

Birth Defects and Developmental Disabilities - CDC's birth defects and developmental disabilities programs seek to reduce or eliminate birth defects, developmental disabilities and other adverse reproductive outcomes resulting from environmental and related causes. Data from CDC's birth defects surveillance programs have been used to solve problems of national significance. In 1991, funds will be used to support birth defects surveillance programs in more than 20 States. CDC is investigating the feasibility of a study to determine if periconceptional vitamin supplementation can significantly reduce spina bifida, a severe and disabling birth defect. Approximately $1,600,000 will continue these activities in 1991.

Injury Prevention - In FY 1991, of a total of $22,660,000 the CDC will make approximately $16.5 million available for a variety of extramural and State/local health agency projects. CDC will continue to provide technical assistance and grant funds to: 7 Injury Prevention Research Centers and 40 individual investigators to conduct applied research in injury prevention and control; 7 State/local health agencies for applied methods injury surveillance; 6 State/local health agencies for targeted injury control interventions; and 15 State/local health agencies for injury control capacity-building. $6.2 million will support intramural injury prevention research and technical assistance to State/local health agencies and others.

Disabilities Prevention In 1991, funding of $4,433,000 will continue the activities initiated in 1988 to enhance the capacity of States to coordinate disabilities prevention activities and to provide technical assistance to communities carrying out disability prevention programs. CDC will seek to develop a national information base for the prevention of primary and secondary disabilities and will also seek to ensure that information developed and prevention services targeted will address the disproportionate burden of disabilities among minority and low income populations.

Laboratory Support - In 1991, with approximately $1,400,000 CDC will continue to perform nutrition measurements to characterize the nutritional status of the U.S. population and guide fortification policy for vitamins and essential elements and to perform measurements of toxic elements to guide prevention efforts towards the most affected population groups.

Dental Health - The Dental Disease Prevention Activity with approximately $870,000, will continue to provide a national and international focus for the control and prevention of dental and oral diseases such as dental caries and peridontal disease.

Summary of Changes

Increases:	FTE	Amount
Built-in increases such as annualization of pay raises effective January 1991, effective Jan., 1990 within grades, FICA, FERS, one extra day of pay FTS, ADP, Computer Center....................................	---	$+2,124,000
Decreases:		
Non-recurring cost of Hanford Study....................	----	-192,000
Equipment - absorption of 1/2 of pay raises effective January 1990 and other unfunded built-in increases.................................	---	-122,000
Net Change:	-	+1,810,000

Occupational Safety and Health

Authorizing Legislation - **Sections 301, 304, 306, 308, 310, 311, 327 of the Public Health Service Act, Sections 20, 21, and 22 of the Occupational Safety and Health Act of 1970, and Sections 101, 102, 103, 201, 202, and 203 of the Federal Mine Safety and Health Act of 1977.**

	FY 1990 Appropriation		FY 1991 Current Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Research	853	$74,204,000	853	$74,675,000	---	+$471,000
Training	---	10,461,000	---	10,461,000	---	---
Total	853	$84,665,000	853	$85,136,000	---	+$471,000

Authorization.......................Indefinite.

Funding levels for the last five fiscal years were as follows:

1986	$64,524,000
1987	$69,907,000
1988	$69,668,000
1989	$70,355,000
1990	$84,665,000

The National Institute for Occupational Safety and Health (NIOSH) in CDC is the Federal agency charged with conducting a national program of occupational safety and health research and dissemination. The purpose of this program is to establish and disseminate scientific and public health information necessary to ensure safe and healthful working conditions for the 124 million American working men and women.

Occupational injuries occur at a rate twice that of injuries in the home or in public places. Severe occupational trauma is second only to the motor-vehicle incidents as a cause of unintentional death in the United States. The National Traumatic Occupational Fatality Surveillance system (NTOF), an injury surveillance program of NIOSH, estimates there are over 7,000 men and women killed at work each year. That is more than one worker every 20 minutes of the workweek. The highest number of fatalities occur in the following industries: mining, construction, transportation, and agriculture. In addition, to these fatal injuries, CDC estimates there are approximately 12 million non-fatal injuries each year to men and women at work. The Bureau of Labor Statistics estimates that about 4 of every 100 workers are disabled by these injuries. The majority of all of these deaths and injuries are caused by preventable, unsafe conditions.

NIOSH conducts research with a core of occupational safety and health professionals operating in multidisciplinary teams comprised of engineers, epidemiologists, industrial hygienists, physicians, and toxicologists. Intramural research is complemented by grants, contracts, and cooperative agreements to form a comprehensive and integrated program. That program consists of four components:

1. **Identification of Work-Related Injuries and Illnesses through:** Surveillance - NIOSH has developed and has been expanding a plan which sets forth specific objectives for focusing efforts to establish national and local surveillance systems, and directly links the surveillance plan to the ten leading work-related diseases and injuries.

NIOSH is supporting various national surveillance projects to collect information on occupational diseases and injuries in agriculture. These include surveillance programs based in rural hospitals, land grant universities, and a U. S. Farm Family Health and Hazard survey. The survey will provide baseline data for evaluating agricultural safety and health intervention programs conducted by NIOSH and other components of CDC. NIOSH is also supporting demonstration and other projects to develop cancer screening for workers in agriculture.

In FY 1990, surveillance of construction site-level prevention programs, hazards, and injuries will be established; one State demonstration program for construction safety and health will be started, and two awards will be made for joint labor-management demonstration projects. In FY 1991, two surveillance reports will be issued; an evaluation of the first year of a State demonstration program and labor-management intervention demonstrations will be completed.

Health Hazard Evaluations (HHE) - Both the Occupational Safety and Health Act and the Federal Mine Safety and Health Act require NIOSH to evaluate the potential toxicity of materials used or found in the workplace, upon receipt of a written request for such an evaluation by employers or employee representatives. The HHE program is in response to these mandates. HHE's evaluate the substances, processes, and work practices found in the workplace to determine whether workers are protected from workplace hazards and to recommend improvements where needed. In order to expand the resources available for HHE's, arrangements are being made to work more closely with State health departments. Greater emphasis will be placed on addressing problems in small businesses.

In response to the specific problem of occupational fatalities, NIOSH is also operating a project called the Fatal Accident Circumstance and Epidemiology (FACE) program. Under this project, NIOSH evaluates the circumstances at a site where a fatal occupational injury has occurred, gives recommendations to improve safety conditions at the site, and collects data needed to evaluate conditions common to the industry as a whole.

	FY 1990 Appropriation	FY 1991 Estimate
Number of HHE's requested	500	500
Number of HHE's completed	475	475
Number of FACE investigations completed	50	50

2.**Evaluation of occupational safety and health injuries, diseases, and hazards.** This component is a program designed to provide an understanding of their causes and to develop methods of prevention targeted intramural and extramural research. Research is focused on the "ten leading work-related diseases and injuries:" occupational lung diseases; musculoskeletal injuries; occupational cancers; severe occupational traumatic injuries; occupationally related cardiovascular diseases; disorders of reproduction; neurotoxic disorders; noise-induced loss of hearing; dermatologic conditions; and psychologic disorders.

Also, in FY 1990 NIOSH is expanding current research activities and initiating programs which specifically address agriculture and construction safety and health issues. The focus for agricultural workers will be respiratory, musculoskeletal, and safety problems. A comprehensive prevention program will be developed which is directed at health problems affecting construction industry workers.

Intramural Research - Scientific research is the core of this program area. The research program in evaluation of occupational safety and health problems is accomplished through: the study of particular worker populations and the identification and evaluation of exposures occurring in the workplace to determine whether specific occupational exposures are associated with an increased risk of developing a disease or disorder; laboratory study of animals exposed to similar hazards typically found in the workplace; and use of research grants to augment the intramural research program.

Research Grants: The large number of interacting factors causing or having potential to cause occupational disease, injury, or premature death dictates the need for a broad program of extramural research to identify and evaluate these problems so solutions can be developed and implemented to control them. The research grants program is a vital component of a national effort to deal with these concerns, and the program engages the resources of a large range of non-profit and for-profit organizations. Universities, colleges, research institutions and other public and private organizations including state and local governments and small, minority businesses are eligible to apply.

An initiative is being developed in 1990 to address the health and safety hazards of construction workers based on the fact that such workers experience three times the national rate of traumatic fatalities and face many health problems, as well. Also, an initiative is being considered to learn more about the occupational hazards found in small businesses, including farming operations, and to support demonstration projects that will lead to effective interventions for reducing or eliminating such hazards.

Research Grants

	FY 1990 Appropriation		FY 1991 Estimate	
	No.	Amount	No.	Amount
New...........	31	$2,946,478	28	$2,698,208
Non-competing continuations	42	$3,554,522	39	$3,802,792
TOTAL	73	$6,501,000	67	$6,501,000

3.**Control of Work-Related Injury and Illness.** This component is carried out through discovering, assessing, and improving measures to reduce occupational hazards, especially through use of engineering controls, protective equipment, work practices, and hazard-detection devices.

Control Technology: Following identification and evaluation of workplace conditions causing or having potential to cause occupational disease or injury, measures can be developed to eliminate these hazards. These measures consist of proper workplace design and work practices, usually in combination. NIOSH conducts control technology assessments, research, and demonstrations, the results of which are directed to industry, labor, health professionals, educational institutions, small businesses, and Federal and State regulatory health and safety programs.

In FY 1990, an engineering control project will be initiated to identify construction operations (asbestos removal, metal exposure in demolition work, dust generation from hand tools, etc.) where control technology is not generally used, assess the way controls can be used (containment of dust, reduction of dust or fumes at the source), and transfer these results to the construction trades. The control technology database will be designed to address this need more generally and comprehensively by developing the concept for how to collect information, the design of its flow, and how to disseminate the information.

Instrument and Methods Development: Research is conducted to develop and evaluate new air sampling and analytical methods, biological monitoring methods, and direct reading instruments for use in measuring and controlling potential chemical and physical hazards in the workplace. Studies are performed to provide performance criteria for aerosol sampling, which is important for determining risk factors in mining, textiles and primary metals industries. Monitoring devices for use inside respirator masks and in various workplace environments are developed and evaluated.

Respirators: In recent years, use of respirators in American workplaces has increased significantly. Currently more than 1,600 NIOSH certifications are in effect for more than 7,000 respiratory makes and models. About 10,000,000 American workers wear NIOSH-certified respirators, either full-time or part-time, to protect themselves from airborne toxic agents. Increased use of respirators has had a substantial impact on the NIOSH certification program and has been managed by streamlining administrative procedures. NIOSH is currently in the process of revising the regulations governing this program to make certification requirements reflect actual product performance.

4.**Dissemination of scientific findings and recommendations.** Research findings and recommendations are disseminated through various channels to all organizations and individuals needing this information to assist them in acting to reduce occupationally related health problems, and provide for the training and development of professionals in occupational safety and health.

Recommendations for regulatory action and other policy statements are transmitted to the Occupational Safety and Health Administration and the Mine Safety and Health Administration and to other regulatory agencies in response to their regulatory activities. Policy statements are prepared in various forms including criteria documents, current intelligence bulletins, alerts, and regulatory responses. NIOSH also develops and disseminates policy statements in the form of "Alerts" and provides testimony for regulatory actions and hearings held by regulatory agencies for proposed standards concerning occupational safety and health issues. Alerts provide a short narrative of new findings or case histories that are published with the intent to reduce injuries, disease or fatalities through prevention strategies. Recommendations are provided directly to industry and union representatives and members so that they can take independent action to reduce occupational disease and injury. In circumstances where immediate action is required to protect workers, such as rescuers working in confined spaces whose deaths could have been prevented had appropriate rescue procedures been in effect, this direct communication is especially important.

Recommendations will be provided directly to employees and workers in agriculture through NIOSH-supported rural hospital-based surveillance, NIOSH-supported agricultural injury and disease prevention programs at the land grant universities, and through other organizations associated with rural populations.

Research findings are published as NIOSH research reports, technical guidelines, and fact sheets, and disseminated to Federal, State, and other research organizations involved in occupational safety and health, trade publications, industry and labor representatives, and individuals in response to their request for information. In addition, findings are published as articles and abstracts in scientific journals, articles in the Morbidity and Mortality Weekly Report (MMWR), as proceedings, books and book chapters for disseminations to the scientific community and the general public.

Findings are also disseminated through educational efforts, conferences, and cooperative efforts with other government, industry, labor, and university representatives. In 1990, NIOSH will be supporting a Surgeon General's Conference on rural safety and health to build coalitions, disseminate information, and encourage action to prevent injury and disease in rural areas.

Worker Notification

NIOSH embarked upon a program to review its completed epidemiologic studies to determine whether subjects of the studies should be individually notified of the results. The studies are retrospective cohort mortality studies and at issue is the notification of surviving members of each cohort. Since these are essentially record linkage studies the members or cohorts generally have not been previously contacted about participation in the studies or about the overall study results. The criteria to be used by NIOSH for assessing whether a completed retrospective cohort mortality study warrants notification were expressed as guidelines in 1986 by the NIOSH Board of Scientific Counselors.

Worker notification in this context involves meetings with companies, unions and public health agencies; locating the correct addresses of the individuals; development and delivery of the appropriate messages, and establishing necessary support systems. In FY 1990, worker notification profiles and analyses will be conducted on ten different mortality and morbidity studies and three study worker notifications will be initiated. In FY 1991, five to ten additional mortality and morbidity studies will be evaluated and three notifications will be completed.

Training Grants

The development of Occupational Safety and Health Educational Resource Centers (ERCs) has demonstrated the effectiveness of providing both academic training and continuing education--training of occupational safety and health professionals, specialists, and para-professionals in the core discipline areas of industrial hygiene, occupational medicine, occupational health nursing, and occupational safety. The ERCs have become a major resource to management and labor for the region in which they are located. Through their outreach programs, the ERCs are also beginning to influence the occupational safety and health content of the curricula in schools of business, engineering, law, and medicine.

The ERCs have been federally funded for the past 14 years, and have been successful in expanding university programs to meet increased student, business, and public health interest in the occupational health field. In addition, the ERCs are in the fourth year of funding programs to support a research training initiative to produce academic faculty and researchers in these fields.

In addition to ERCs, which provide training for multi-disciplines, training project grants offer NIOSH the opportunity to provide creative approaches to developing occupational safety and health manpower in underserved geographic areas, predominantly black colleges, single discipline programs, and unique areas such as training for occupationally-oriented physician assistants.

The Industrial Medical Center (IMC) at West Virginia University has been funded for two years and is focused on developing an occupational medicine program and providing occupational safety and health outreach in the state.

Training Grants

	FY 1990 Appropriation		FY 1991 Estimate	
	No.	Amount	No.	Amount
New/Competing Continuations	16	$ 2,744,000	8	$ 480,000
Noncompeting Continuations	26	7,717,000	34	9,981,000
(Educational Resource Centers)	(14)	(8,270,000)	(14)	(8,270,000)
TOTAL	42	$10,461,000	42	$10,461,000

Occupational Safety and Health
Funding By Activity

Intramural Research	FY 1990 Current Services	FY 1991 Estimate
Identification:		
Surveillance	$ 7,940,000	$ 7,990,000
Health Hazard Evaluation/Technical Assistance	8,695,000	8,750,000
Targeted Research:		
Occupational Lung Diseases	8,100,000	8,140,000
Musculoskeletal Injuries	1,560,000	1,570,000
Occupational Cancers	4,040,000	4,065,000
Severe Occupational Traumatic Injuries	1,045,000	1,048,000
Occupationally Related Cardiovascular Diseases	540,000	542,000
Disorders of Reproduction	2,070,000	2,085,000
Neurotoxic Disorders	1,170,000	1,175,000
Noise-Induced Loss of Hearing	580,000	585,000
Dermatologic Conditions	520,000	523,000
Psychologic Disorders	880,000	888,000
Control & Personal Protective Equipment	8,185,000	8,242,000
Dissemination	7,090,000	7,140,000
Subtotal..............................	$52,415,000	$52,743,000

Extramural Research	FY 1990 Current Services	FY 1991 Estimate
Identification:		
Surveillance	4,385,000	4,405,000
Health Hazard Evaluation/Technical Assistance	320,000	323,000
Targeted Research:		
Occupational Lung Diseases	3,850,000	3,870,000
Musculoskeletal Injuries	1,120,000	1,130,000
Occupational Cancers	2,700,000	2,720,000
Severe Occupational Traumatic Injuries	639,000	645,000
Occupationally Related Cardiovascular Diseases	320,000	323,000
Disorders of Reproduction	985,000	993,000
Neurotoxic Disorders	935,000	943,000
Noise-Induced Loss of Hearing	665,000	670,000
Dermatologic Conditions	390,000	395,000
Psychologic Disorders	690,000	695,000
Control & Personal Protective Equipment	2,800,000	2,820,000
Dissemination	1,990,000	2,000,000
Subtotal..............................	$21,789,000*	$21,932,000*
Training	$10,461,000	$10,461,000
Total, Occ. Safety & Health	$84,665,000	$85,136,000

*Includes $6,501,000 in research grants

Summary of Changes

Increases:	FTE	Amount
Built-in increase such as pay raises effective January 1991, annualization of pay raises effective January 1990, within grades, FICA, FERS, one extra day of pay, and ADP Computer Center..	---	+$3,072,000
Decreases:		
Non-recurring cost of Surgeon General's Conference	---	-123,000
Equipment - absorption of 1/2 of pay raises effective January 1991, and other unfunded built-in increases..	---	-2,478,000
Net Change:	---	$+471,000

Epidemic Services

Authorizing Legislation - Sections 301, 307, 310, 311, 322, 325, 327, 352, 353, 361 thru 369, and 1102 of the Public Health Service Act (PHS).

FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
FTE	BA	FTE	BA	FTE	BA
876	$55,388,000	901	$68,180,000	+25	+$12,792,000

1991 Authorization.................................... Indefinite

Funding levels for the last five fiscal years were as follows:

1986	$49,025,000
1987	$53,045,000
1988	$54,249,000
1989	$57,787,000
1990	$55,388,000

Purpose and Method of Operation

The objectives of the epidemic services activity are to:

- Provide for the prevention and control of epidemics and protect civilian population from pubic health crises such as biological and chemical emergencies.
- Maintain surveillance systems, analyze data, and respond to public health problems when indicated.
- Train public health epidemiologists.
- Carry out the quarantine program as required by regulations.
- Improve the quality of life in developing countries through reduced morbidity and mortality utilizing the Global Epidemic Intelligence Service.

The epidemic services are an integral part of this Nation's approach to protecting its civilian population from outbreaks of disease and from misuse of chemicals and biological agents. These programs are carried out by: maintaining surveillance systems, epidemic investigators and laboratory capabilities for identifying and investigating potential problems; collecting and analyzing data; and recommending appropriate actions to protect the health and lives of the American people. ($3,777,000 and 45 FTEs)

Bringing public health problems to rapid and successful conclusions prevents costly morbidity and mortality. Even without considering the human factor involved, the costs effectiveness of these epidemic services has been well documented. Activities continue to range from identifying cases of food poisoning from contaminated food to the large investigations, such as Legionnaires Disease and Toxic Shock Syndrome. CDC efforts will continue to provide the U.S. with a ready and competent staff to travel to any part of the world to investigate epidemics which impact on the health of the U.S. population. ($6,392,000 and 117 FTEs)

Early recognition of adverse health conditions and rapid application of prevention and control measures are fundamental to CDC's contribution to protecting the health of the American people. To support this CDC-wide response capability, a number of epidemic services are required: disease diagnosis; rapid reporting; surveillance; and epidemiologic investigations. ($515,000 and 24 FTEs)

Epidemic aid activities require CDC to maintain competence in many diseases that seldom occur, such as plague, small pox, Lassa Fever, etc., and provide laboratory capabilities to support disease investigations. In FY 1990 CDC is conducting a program of scientific inquiry and research to solve practical public health problems and support selected programs to assist States, health organizations, and others in two priority areas: infant health and reproductive health. ($270,000 and 5 FTEs)

1991 Request

In FY 1991, an increase of $11,500,000 and 25 FTEs is requested for CDC's Epidemic Services - Infant Health activities. CDC carries out surveillance and epidemiologic investigations, and provide technical assistance in program development and evaluation to reduce perinatal, neonatal, and postneonatal mortality and morbidity associated with low birthweight (LBW), sudden infant death syndrome (SIDS), birth defects, prematurity, and complications of pregnancy. These health problems account for over 1.9 million years of potential life lost each year. In partnership with States, efforts are directed toward reducing adverse pregnancy outcomes by identifying risk factors, and applying appropriate interventions to reduce those risk factors. Major emphasis is being placed on maternal factors related to LBW, and on the causes of differences in LBW and infant mortality among blacks and whites. In addition, assistance is being provided to States in implementing smoking cessation programs in public prenatal clinics and WIC clinics. Over 900,000 children are born each year to women who smoke, a practice that doubles the risk of LBW and increases the risk of stillbirth or neonatal death by up to 100 percent. Early results show a 50 percent increase in the number of pregnant women who quit smoking in intervention sites compared to control sites.

The CDC has assisted States in developing two ongoing systems to monitor modifiable health and nutrition risks, such as cigarette and alcohol use, stress factors, and inadequate access to maternity and well-baby care. The population-based Pregnancy Risk Assessment Monitoring System, now operating in six States, provides Statewide data. The improved program-based Pregnancy Nutrition Surveillance System is now being demonstrated in eight States, and provides detailed information on high-risk women.

Under the Congressionally-mandated National Nutrition Monitoring System, CDC conducts State-based surveillance activities directed towards infants and children. Among these activities are the Pediatric Nutrition Surveillance System which continuously monitors major indicators of the nutritional status of low-income, high-risk children serviced in delivery programs such as Maternal and Child Health (MCH), and the Special Supplemental Food Program for Women, Infants, and Children. The Severe Pediatric Undernutrition System (SPUN) is assessing the technical feasibility of determining the prevalence of severe pediatric undernutrition as well as associated etiologies and risk factors in four States.

The FY 1991 Infant Health Initiative provides for expanded efforts to reduce infant mortality, with particular emphasis on improved State capability for surveillance and targeted investigations of black/white gaps in infant mortality and Fetal Alcohol Syndrome. CDC will augment support for national surveillance efforts, direct assistance through assignees, and statistical and epidemiological assistance and consultation. CDC will rapidly implement (1) enhanced State-based surveillance and technical assistance to improve data availability and use; (2) augmented State MCH epidemiologic and analytic capability and support; and (3) assistance to interested States for widespread dissemination of smoking cessation programs for high risk, low-income, pregnant women. State personnel will be trained to implement smoking cessation programs in public prenatal and WIC clinics and to monitor the quit rates and prevention of LBW in the recipients.

Reproductive Health - Surveillance, investigation, and technical assistance are carried out to help reduce morbidity and mortality related to contraception, pregnancy, and human reproduction.

Summary of Changes

Increase:	FTE	Amount
Built-in increases such as cost of pay raise effective Jan. 1991, annualization of pay raises effective January 1990, within grades, FICA , FERS, one extra day of pay and ADP Computer Center..............................	---	$+3,836,000
Program - infant health........................	+25	+11,500,000
Decrease:		
Equipment - absorption of 1/2 of pay raises effective January 1991 and other unfunded build-in increases...........................	---	-2,544,000
Net Change:..	+25	$+12,792,000

Health Statistics

Authorizing Legislation - Title III of the Public Health Service Act, Section 301, 304, 306, and 308.

Resource Requirements:

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Program Operations	431	$45,271,000 /1	431	$44,884,000	---	-$378,000
Program Support	54	3,206,000	54	3,244,000	---	+38,000
Appropriated Funds	485	$48,477,000	485	$48,128,000	---	-349,000
PHS Eval. Funds	---	19,000,000	---	19,000,000	---	
Total	485	67,477,000	485	67,128,000	---	-349,000

/1 Reflects proposed reprogramming of $1.4 million from Immunization - parent/patient notification to Health Statistics.

1991 Authorization: Authorization expires September 30, 1990. An extension is pending.

Funding levels for the past five years were as follows:

1986	$44,600,000
1987	52,125,000
1988	48,604,000
1989	48,351,000
1990	48,477,000

Purpose and Method of Operations

The National Center for Health Statistics (NCHS) is the nation's principal health statistics agency, mandated to monitor the nation's health and use of health services and to explore the relationships between risk factors and disease. A clear understanding of health problems and their impact on the population and economy serve as the foundation of the Nation's public health, health research, and health policy efforts. Health officials and researchers in CDC, the Department, State/Local governments, and the private sector rely heavily on NCHS data for fundamental measures of the nation's health, such as:

- Infant mortality, low birth weight, access to prenatal care, and risk factors associated with pregnancy.
- Death from cancer, heart disease, and other causes of death.
- Trends in mortality and life expectancy.

- The use of hospitals, nursing homes, physician services, and other health services.

- The impact of disease and disability on the nation's people, economy, and health system.

- Personal habits that affect health, such as smoking, alcohol abuse, and nutrition.

- Public awareness of health risks, such as transmission of HIV.

New demands are increasingly being placed on the nation's health statistics system. Changes in the population, new emphasis on setting and achieving national health objectives, and changes in the financing and delivery of health care require close monitoring and analysis. Examples of these include:

- The Year 2000 Objectives for the Nation place special emphasis on surveillance and statistics, and a majority of the objectives rely on NCHS data to track progress. Each priority area (e.g., HIV, Infant Mortality, Nutrition) identifies specific data needed for tracking, and the final priority area focuses exclusively on improving surveillance and data systems.

- Health problems of minorities and other vulnerable population groups continue to be the focus of attention. NCHS has been instrumental in calling attention to gaps between whites and blacks, and faces a growing challenge in adequately assessing the health of Hispanics and other rapidly growing population groups.

- The aging of U.S. population ha~~s become~~ recognized as a phenomenon that has significant implications for quality of life and independent living, and for the demand for long term care and other health services. Longitudinal surveys conducted by NCHS are among efforts to better understand factors that predict disability, dependency, and institutionalization.

- Issues relating to the family, including the social, economic, and physical health, are increasingly the focus of consideration in the formation of health and social policy. Increasingly, information is sought on the formation and dissolution of families, reproductive health and planning, access to insurance and health care, and the impact of illness on the family unit.

- Cost and financing considerations dominate consideration of health policy. In order to address issues of payment mechanisms and quality of care, and to assess the impact of new policies, it is essential that accurate statistics on the use of health care services be obtained.

- As programs become more sophisticated and resources more scarce, there is a greater recognition of the need to target public health interventions to population groups at greatest health risk. Effective use of statistics to identify these groups assures that program funds are used efficiently. At the same time, there is greater need for the use of statistics to evaluate public health interventions to assure that programs are effective.

NCHS Data Systems: To respond to these needs for data, in FY 1990 and 1991 NCHS will maintain more than a dozen data systems, as well as programs for analysis and interpretation of data, data dissemination, and research on statistical methodology. These data systems fall into four categories:

- **National Vital Statistics System**: Data from vital events are among the most fundamental measures of the health of the population. Through vital statistics, trends in life expectancy, infant mortality, suicide, and mortality from cancer, heart disease, and other causes are monitored. National data on vital events (births, deaths, fetal deaths, marriages, divorces, and abortions) are obtained through a nationwide network with the States. Data are collected from certificates of death, fetal death, abortion, marriage, divorce, and birth. Data from birth certificates include all risk factor, demographic, infant health, and delivery data. Related efforts include an ongoing program to link birth and infant death records, allowing for effective monitoring of infant mortality trends as part of DHHS initiatives to reduce infant mortality, and "followback" surveys such as the National Maternal and Infant Health Survey and the National Mortality Followback Survey.

- **Personal Interview Surveys**: NCHS will conduct personal interview surveys which provide comparative information on healthy persons and relate illness and disability to daily functioning, access and payment for medical care, and other variables. Three interview surveys are maintained, the largest of which is the National Health Interview Survey (NHIS). The NHIS is a principal national source of annual information on the incidence of illness, prevalence of disease and disability, and individual use and access to health services. This survey, which has been conducted annually since 1957, also serves as a vehicle for special purpose data collection on topics of high priority to PHS agencies. The 1990 NHIS will measure whether many of the nation's 1990 Health Promotion/Disease Prevention objectives had been met through questionnaire components on smoking, dental health, physical fitness etc.

- **Health Examination Surveys**: The National Health Examination and Nutrition Surveys (NHANES) provide unique information on the health and nutritional status of the American population obtained through physical examinations, clinical and laboratory tests, and interviews. The third national survey (NHANES III) is currently collecting data and, over a six year time period, 30,000 persons selected as representative of the U.S. population will be examined. The survey will yield estimates of the prevalence of the major chronic diseases afflicting Americans and risk factors for them. The information will be used for health policy analyses including identifying unmet health care needs, targeting intervention programs, and reviewing food fortification policy, as well as for epidemiological research.

Surveys of Health Care Providers: Surveys of health care providers are the most effective mechanism for obtaining detailed, reliable information on health care services. Separate surveys have been conducted for hospitals, nursing homes, and physicians, as well as an inventory of inpatient health facilities. Rapid changes are occurring in the way health care is organized, financed, and delivered, and the traditional NCHS surveys no longer presented a complete picture of the care provided. NCHS has responded to the changing patterns of medical practice and care delivery by redesigning its health care provider surveys using an integrated sampling methodology. The National Health Care Survey (NHCS) has merged previously independent surveys, converted periodic surveys to annual cycles, and has the capability to cover care provided in new settings. As an aid to epidemiologic and policy research, the new design will allow for more detailed follow-up of patients to obtain data on outcomes and subsequent care. In FY 1990-91, the Institute of Medicine and Committee on National Statistics will be convening an expert panel to provide advice on the design and approach to the NHCS, and provide guidance on priorities for implementing components of the survey.

NCHS relies on several sources of funds to support the nation's health statistics system. In any given year, the data collection and analysis program is determined by technical considerations on the frequency of data collection and by the level of resources available from these sources. In FY 1991, the request provides $48,128,000 in budget authority; and $19 million in PHS one percent evaluation funds. In addition funds will be received under the Reimbursable Work Program. In order to address the individual data requirements of other Federal agencies, many data systems are designed with built-in flexibility, allowing for adding questions or examination procedures to existing data collection mechanisms as required.

Summary of Changes

Increases:	FTE	Amount
Built-in increases such as cost of pay raises effective Jan., 1991, annualization of pay raises effective in January 1990, FICA, FERS, one extra day of pay, FTS, Computer Center, and inflationary cost on contracts....................	---	$+1,557,000
Decreases:		
Lower priority health statistics activities to absorb cost of 1/2 of pay raises effective January, 1991, and other unfunded built-in increases	___	-1,906,000
Net Change...	---	-$349,000

HIV Prevention

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Program Operations	768	$442,826,000	848	$509,103,000	+80	+$66,277,000

Authorization:...........Indefinite

Purpose and Method of Operation

HIV infection continues to be a major public health problem in the United States. As of December 31, 1989, a cumulative total of 117,781 AIDS cases had been reported to CDC. Over half of the reported persons with AIDS have died. Of the 1,995 children under 13 year of age reported, 715 cases, or 36 percent, were reported during the past year. In the first 12 months of 1989, a total of 35,328 AIDS cases were reported. Homosexual men constitute 60.6 percent of cumulative adult AIDS cases reported to CDC and 56.6 percent of the cases reported to date in 1989. Intravenous drug abusers with AIDS represent 23.4 percent of new cases in 1989; in 1988, over 50 percent of the AIDS cases reported among blacks and Hispanics were associated with intravenous drug use (IVDU). Racial and ethnic minority populations continue to be disproportionately affected by the epidemic. Blacks and Hispanics account for 27.4 percent and 15.5 percent, respectively, of the reported cumulative adult AIDS cases. Blacks represent 52.7 percent, and Hispanics 24.5 percent, of the pediatric cases.

Because 68 percent of the AIDS cases were less than 40 years of age, the estimated years of potential life lost due to AIDS-related mortality is extremely high. AIDS, when compared to other causes of mortality, currently ranks seventh in years of potential life lost before the age of 65 years.

In PHS, the battle against HIV infection has involved all relevant operating agencies, with coordination provided by the National AIDS Program Office and the PHS Executive Task Force on AIDS. Within this operating framework, CDC is the leading PHS agency for HIV prevention efforts.

This budget request supports a comprehensive program to prevent the spread of HIV infection in the United States. The HIV prevention program represents close collaboration with other PHS agencies, particularly the Alcohol, Drug Abuse, and Mental Health Administration; the Food and Drug Administration; the Health Resources and Services Administration; the National Institutes of Health; and the Office of the Assistant Secretary for Health, including the Office of Minority Health, the National AIDS Program Office. Successful implementation of the program involves working closely with and through State and local health and education agencies, national and local minority organizations, national and community-based organizations, academia, labor, and industry.

In 1990 and 1991, CDC will provide leadership, and scientific and technical assistance in preventing the spread of HIV and reducing associated morbidity and mortality. It accomplishes its mission by developing, promoting, and/or supporting programs to: (1) assess the risk of HIV infection associated with behaviors, practices and occupations; (2) prevent HIV transmission among HIV-infected persons; (3) promote the rapid transfer of appropriate methodologies into clinical and public health practice; and (4) strengthen HIV prevention capacities and promote collaboration among governmental, public and private agencies, and organizations at local, State, regional, national and international levels.

CDC maintains surveillance of AIDS cases, in collaboration with State, territorial and selected local health departments. Financial assistance is provided to 65 health departments to support active surveillance of AIDS cases. In fiscal year 1990, efforts will be directed toward evaluating and improving the completeness and timeliness of case reporting and improving mathematical modeling of the AIDS and HIV epidemics. In addition, sentinel surveillance of HIV infection will be conducted in more than 35 States. CDC will also initiate studies to determine mortality rates caused by HIV/AIDS among individuals of various risk groups, geographic areas, and financial means.

To assure the quality of HIV testing, CDC will be evaluating laboratories across the country which are performing testing for HIV antibody. Over 1400 laboratories are currently participating in CDC's Model Performance Evaluation Program.

CDC collaborates with health departments, universities, medical centers, blood banks, voluntary agencies, other Federal agencies, and uses its own facilities to carry out epidemiologic and laboratory studies to determine the natural history of HIV infection and to identify and monitor risk factors for HIV transmission. Since 1981, CDC has conducted specialized, intensive epidemiologic studies to: contribute to understanding the natural history of HIV; investigate modes of HIV transmission; identify those at risk; document co-factors associated with increased risk for acquiring the infection; and provide HIV risk-reduction guidelines and prevention recommendations applicable to large segments of society. CDC-sponsored investigations include studies of homosexual and bisexual men, intravenous drug users, persons with hemophilia, transfusion-associated AIDS cases, sexual partners of persons with HIV infection or at increased risk for the disease, children with AIDS, newborns with HIV infection, AIDS-infected women of childbearing age, infected pregnant women, heterosexual transmission, and female prostitutes.

CDC will continue FY 1990 and 1991 efforts to identify cellular, virologic, and immunologic factors involved in HIV replication, utilizing polymerase chain reaction (PCR), gene sequencing, and other available techniques. Development of tests for these factors will be undertaken to better understand virus latency and factors leading to disease progression. This should yield information related to the development of new diagnostic tests and therapeutic interventions. Studies will also continue on: biosafety issues; testing of sera from asymptomatic HIV seropositive individuals, those with lymphadenopathy syndrome, AIDS patients, and other high-risk individuals, using purified individual proteins of HIV in order to correlate virus antibody profiles with disease.

Since there are currently no effective therapies or vaccines to cure or prevent HIV infection, information and education continue to be the most viable options available to combat the growing epidemic. CDC is conducting a comprehensive, national program designed to prevent HIV infection among persons at increased risk. The program provides financial and technical support to all States and selected cities in planning, implementing, and evaluating HIV prevention activities including: health education/risk reduction; counseling, testing, and partner notification; and referral to appropriate medical evaluation and care. Increased HIV prevention efforts will also be directed to IVDUs in FY 1990 and 1991.

Separate funding will continue to be provided to any local health department which serves the largest political jurisdiction in a metropolitan statistical area (MSA), when such MSA reported more than 2000 AIDS cases as of June 30, 1989, and such cases represent at least 75 percent of the AIDs cases reported in the State.

Ethnic and racial minority populations, particularly blacks and Hispanics, have been disproportionately affected by the HIV epidemic. Therefore increased efforts directed toward those minority populations will continue and emphasis will be placed on the control of genital ulcer diseases and their role in HIV transmission. In addition, studies of behavioral risk factors for HIV infection and the effectiveness of interventions in adopting and sustaining low risk behaviors will be conducted and evaluated. The newly established Office of the Minority HIV Policy Coordination will ensure that prevention activities are appropriately targeted and that technical assistance is provided to racial and ethnic populations. These HIV intervention activities will be supplemented by providing additional funds directly to national, regional, and community-based organizations (CBOs) which represent or serve minority populations. In addition, more than 345 such CBOs will continue to receive funds through State and local health agencies.

Support for the prevention of maternal/infant HIV infection will also continue to expand. HIV prevention efforts directed to persons with hemophilia will continue in FY 1991 at the FY 1990 level. In addition, CDC continues to support community demonstration projects and projects addressing HIV-related tuberculosis.

To reach our nation's young people, CDC has implemented a program to inform and educate school and college-aged youth about HIV within the context of comprehensive school health education. Support is provided to State and local education agencies for initiating or augmenting health education and HIV prevention programs in schools. In 1990, evaluation models will be developed to assess the effectiveness of efforts to educate school children about AIDS and HIV infection. Increased information and education efforts will also be directed to college and university students. In addition, support will be provided to national organizations working with youth in and out of school to stimulate and assist in the implementation of HIV education efforts. To further teacher training efforts in FY 1990 CDC will initiate and continue in FY 1991 assistance to 30 centers to provide teacher training in comprehensive school health education. In addition, national organizations will be provided support to help disseminate comprehensive school health curricula.

Efforts to inform and educate the public about AIDS and HIV infection include: a National Public Information Campaign; the National AIDS Hotline; and the National AIDS Information Clearinghouse. These efforts are complemented and reinforced through CDC support of public information efforts carried out by State and local health departments.

The Campaign, "America Responds to AIDS" was initiated in 1987 and has consisted of several phases directed to different target audiences. The most recent phase, launched in May 1989, was directed to parents and youth.

The National AIDS Hotline has been greatly expanded to respond to growing public information needs. The Hotline toll-free system (1-800-342-AIDS) was connected to the Clearinghouse database in fiscal year 1988 to expand the scope and validity of the information used. A Hispanic Hotline (1-800-344-SIDA) was established in May 1988, and the Telecommunications Device for the Deaf (TDD) service was initiated in August 1988. The number of calls per week to the Hotline is approximately 24,500.

The National AIDS Information Clearinghouse System was initiated in fiscal year 1987 to meet the needs of officials and program managers at all levels for resources and materials which may be used in program development. Two databases were subsequently developed and added. Reference specialists at the Clearinghouse use these resources (one of organizations involved in HIV and one of materials) to respond to both telephone and written inquiries. Direct on line access to the databases has been provided to officials and managers. Over one million items of HIV informational materials continue to be mailed from the Clearinghouse each week in response to inquiries. In 1989, the National Institute of Allergy and Infectious Diseases (NIAID), the National Library of Medicine (NLM), and the Food and Drug Administration (FDA), inaugurated a database of clinical trials and drug protocols information for the public through a toll-free hotline (1-800-TRIALS-A) managed by CDC's National AIDS Information Clearinghouse. Five to six hundred calls are being received each week.

CDC supports a number of efforts that are designed to enhance HIV prevention capacities and promote collaboration among governmental, public and private agencies, and organizations at international, national, regional, State, and community levels.

CDC provides training in new techniques to laboratory workers from across the country to improve the quality of test results. Training related to HIV counseling, testing, and partner notification is provided to health workers from State and local HIV prevention programs.

In addition, CDC provides technical and financial assistance to national organizations to develop information and education HIV prevention programs targeted to their respective constituencies including businesses, labor unions, State legislators, and media executives. CDC also provides direct funding to community-based organizations to conduct information and education efforts to prevent HIV infections.

The Budget Request

Increases in the 1991 HIV prevention budget are directed primarily to: improving reporting of AIDS and HIV infections; examining potential occupational HIV infection acquisition/transmission in high-risk health care delivery/public safety settings; evaluating HIV counseling and testing approaches and outreach HIV prevention efforts directed to IVDUs; preventing HIV transmission among women and infants; reaching high-risk youth; maintaining the current capabilities of the National AIDS Information Clearinghouse and Hotline; and expanding HIV-related laboratory training and quality assurance. The request includes the following increases:

- $3,040,000 to develop and evaluate a simplified reporting system for symptomatic HIV-related disease in adults and adolescents as a means for monitoring trends in HIV-related disease and health-care costs in selected geographic areas. The system will employ a simplified case definition and reporting form to enhance the maintenance of a case reporting system and to improve the completeness of reporting, especially in high incidence areas. The simplified definition would decrease specificity but would allow more persons with HIV-related disease requiring medical care to be reported. CDC will evaluate the effectiveness of alternative reporting systems.

- $2,606,000 to provide financial support and technical assistance to standardize HIV reporting and to receive and disseminate summary data from 15-20 States with HIV reporting. CDC will also implement demonstration projects in collaboration with 2-4 major city or State health departments to evaluate the effects and potential benefits of such reporting for monitoring the HIV epidemic and for targeting and assessing prevention programs, including partner notification.

- $4,343,000 to conduct a major epidemiologic study of surgeons and other appropriate personnel in 5-10 U.S. hospitals and appropriate settings to estimate the frequency of blood exposures, the risk of infection attributable to these exposures, the determinants of exposure (i.e., type of procedure, use of protective equipment, etc.), and the efficacy of preventive measures. Workers may be at risk for the development of HIV infection through occupational exposure to blood and other fluids likely to contain HIV. Epidemiologic studies have quantified the level of risk of acquisition of HIV per exposure episode in limited populations; however, no meaningful estimates of extent and circumstances of exposure exist for workers outside the hospital or for a number of high risk hospital workers such as surgeons and other appropriate personnel.

- $4,054,000 to undertake evaluations designed to document the impact of alternative counseling techniques on behavior and subsequent HIV serostatus among high risk persons of different socio/demographic characteristics, especially poly-drug users, sex partners of infected persons, and minority populations. Early detection of HIV infection can lead to substantial improvement in quality of life and reduction of further transmission. HIV counseling and testing programs allow for the identification of those already infected, the delivery of targeted health information and education tailored to the individual's infection status and behavior, and the referral of the person to appropriate follow-up, including determining the need for prophylaxis for pneumocystis pneumonia. Careful evaluation is needed to identify the most effective interventions.

o $14,043,000 to prevent HIV transmission among women and infants. Women now comprise ten percent of reported cases of AIDS, and the prevalence of HIV infection in women of reproductive age is increasing. This increase would permit CDC to initiate targeted intervention in extremely high incidence cities and conduct epidemiologic studies to assess: 1) the determinants of contraceptive use (including condoms) and the integration of these determinants into HIV prevention strategies; 2) knowledge of risk status and other service delivery issues during pregnancy; 3) the impact of HIV infection on pregnancy; 4) the biologic determinants of HIV transmission from mothers to infants; 5) tests to diagnose HIV infection early in infancy; 6) the impact of HIV infection on infant, childhood, and maternal mortality; and 7) the perinatal impact of HIV-2 in African populations under study. CDC is in a unique position to address these issues because of our ongoing studies with multiple collaborators, both domestic and international, who are currently investigating these research issues through established cohorts of HIV-infected women and children. Due to the low numbers of pediatric cases in individual areas, it is essential to have these multiple site collaborations. Also, CDC is in a position to rapidly transfer new diagnostic technology to public health laboratories to maximize its application to children infected with HIV.

This increase would also permit CDC to develop a uniform system for reporting all children with HIV infection. Current surveillance identifies only severe HIV disease in children and is inadequate to maximize benefits from recent progress in diagnostics and clinical management. In addition, public health agencies need to care for the social needs of many of these infected children, both symptomatic and asymptomatic. The Secretary's Pediatric HIV Disease Work Group recommended that surveillance be broadened to include all children with HIV-related diagnoses. In May 1989, the Council of State and Territorial Epidemiologists (CSTE) also endorsed this recommendation. Through cooperative agreements, CDC would provide technical assistance and funds to State health departments requiring assistance (estimated to be 20-25 States) to establish this comprehensive surveillance system, emphasizing coordination with established pediatric clinical centers. Expanded surveillance would more fully determine the problem of pediatric HIV infection and facilitate improved planning for targeted prevention activities, health care and social services.

This enhancement is consistent with recommendations of the Presidential Commission on the HIV Epidemic and provides both a service program and a surveillance component consistent with the recommendations made by the Secretary's Pediatric HIV Disease Work Group.

o $4,054,000 to assess the effectiveness of street outreach in reducing rates of HIV infection in IVDUs and their sex partners. Street outreach to IVDUs, often by former IVDUs acting as peer educators, has been widely implemented in community-based HIV prevention programs. Typically, street outreach teams are stationed in neighborhoods with a high prevalence of drug use, and provide face-to-face education about abstaining from or seeking treatment for drug use and about disinfecting and not sharing drug paraphernalia, if intravenous drug use continues. These teams also provide information on HIV transmission, safer sex practices and contraception. Some outreach programs include referrals to drug treatment programs and/or HIV counseling and testing programs. While CDC has been urged by local organizations to increase support of outreach programs, the effectiveness of these in reducing HIV infection rates in IVDUs should be rigorously evaluated.

- $1,737,000 to annualize funding for approximately 32 minority organizations and consortiums which are currently supported through the National and Regional Minority Organizations Grant Program.

- $5,231,000 to strengthen the HIV prevention capacities of organizations that provide social, economic, and other services to youth who are most likely to engage in high-risk behaviors. CDC's support would also enable these organizations to plan, develop, implement, and evaluate HIV prevention alternate approaches. Runaway, homeless, and street teenagers in high HIV seroprevalence cities are at increased risk for HIV infection. Many of these youth engage in prostitution, use drugs, or exchange sex for food, shelter, and drugs. Limited, unpublished seroprevalence studies show that many such youth are already infected with HIV. Since little is known about the prevalence of risk behaviors and behavioral determinants among these populations, behavioral studies will be supported to address this need.

- $5,647,000 to maintain the range of services and an adequate supply of materials in the National AIDS Information Clearinghouse (NAIC), to meet the anticipated public demand. The NAIC, which has distributed over 38 million publications in its first year of operation, provides technical assistance and critical resource information directly to the public and through the National AIDS Hotline. The NAIC serves as a centralized repository for key information and will continue to coordinate the development and networking of PHS information and databases related to HIV and AIDS. Through the National AIDS Hotline, the NAIC makes all of this information available to the public through toll-free telephone numbers. During the first year of operation, the Clearinghouse concentrated on developing and implementing its core databases and distribution services. During its second year, it maintained these activities and expanded its reference and materials acquisition efforts to other PHS agencies. The printing necessary to meet the public's current demand (1,000,000 documents a week) has required significant increases in printing costs.

- $1,303,000 to sustain the level of services provided to the public by the National AIDS Hotline. Increased utilization of the Hotline has resulted in a four-fold increase in the number of telephone lines available to the public, from 11 in 1986 to 44 in 1988. In 1988, a dedicated Spanish Hotline Service and a telecommunications device for the deaf (TDD) system were added. The majority of requests from the public for materials distributed by the NAIC come from callers to the National AIDS Hotline.

- $3,475,000 to expand HIV-related laboratory training and quality assurance. As the demand for HIV counseling and testing increases, the need to assure the quality of those tests will also increase. CDC will expand HIV-related laboratory training in the performance of CD4/T cell assays and in detection of HIV antibody, antigen, and opportunistic pathogens which cause disease in HIV-infected individuals.

- $16,744,000 cost-of-living increase of base program and restoration of FY 90 sequester.

HIV/AIDS
(dollars in millions)

	FY 1990 Appropriation	FY 1991 Estimate	Increase or Decrease
I. Basic Science Research	$5,309	$5,536	$213
II. Risk Assessment and Prevention			
A. Surveillance	87,576	96,867	9,182
B. Population-Based Res: Nat Hist, Trans, Risk Factors	38,411	44,157	5,781
C. Information & Education/Preventive Services	311,530	362,543	51,131
o High Risk or Infected Persons	(171,608)	(200,074)	(28,538)
- Counseling, Testing, and Partner Notification	(92,414)	(99,844)	(7,319)
- Hemophilia	(10,989)	(11,298)	(294)
o Special Minority Initiatives	(44,952)	(48,368)	(3,355)
o School and College Aged Youth	(45,617)	(52,520)	(6,910)
o General Public & Special Programs	(38,551)	(46,909)	(8,413)
o Prevention Capacity Enhancement	(10,802)	(14,672)	(3,914)
CDC Total:..................	$442,826	$509,103	$66,277

Summary of Changes	FTE	Amount
Increases:		
Built-in increases such as cost of 1/2 of pay raise, annualization of positions new in 1990, within grades, one extra day of pay, FICA, FERS, FTS, rent, computer center, and inflation cost on contracts..................................	---	+10,978,000
Program increases..............................	+80	+55,299,000
Net Change:	+80	+66,277,000

Building and Facilities

Authorizing Legislation - Section 321(a) of the Public Health Service Act.

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
	---	6,910,000	---	7,900,000	---	+990,000

1991 Authorization.................................... Indefinite

Funding levels for the past five years were as follows:

1986	$22,895,000
1987	2,612,000
1988	1,915,000
1989	1,976,000
1990	6,910,000

Purpose and Method of Operation

The CDC's management has the responsibility to: assure that the CDC has adequate facilities and equipment to do its job; assure that all facilities, particularly laboratories, are safe for both workers and the community; protect the facility investment of the Centers for Disease Control by preventing deterioration and by upgrading, where necessary; ensure that buildings and facilities meet current required standards; and meet the Centers' responsibility to reduce or conserve the energy necessary to operate the Centers' facilities and equipment.

To meet these goals, the Centers' management continuously monitors the need for repairs and improvements of the facilities. Priority rankings are assigned to each required project to ensure the accomplishment of those projects which are mandatory to protect the facility investment of the Centers, and ensure that quality facilities are available to the programs of the Centers. Management also determines the need for and schedules major renovations, construction, and other facility and equipment projects.

Rationale for the Budget Request

Included in the request is $4,000,000 for annual on-going maintenance and repair that occur, such as, broken pipes, burned out motors, air conditioning failure, etc. The second part of the request is for $3,900,000 to fund other, larger-scale repairs and maintenance projects. A portion of the CDC facilities are over 20 years of age without having had major maintenance or repair. The list of repairs includes projects, such as; replacing inefficient antiquated burners and controls on boilers; replace fire alarms; replace old elevators; provide radioactive storage; replace roofs, electrical switchgear, water tanks, steam traps, vacuum pumps, refrigerators, and chemical feed system; etc.

Summary of Changes

Increases:	FTE	Amount

Summary of Changes

Increases:		
Repairs and improvements....................	---	+$5,926,000
Deceases:		
Non-recurring cost of priority construction project	---	-$4,936,000
Net Change:	---	+$990,000

Program Management

Authorizing Legislation - Title III, XIX, and Section 1102 of the Public Health Service Act, the Federal Mine Safety and Health Act of 1977, and the Occupational Safety and Health Act of 1970.

	FY 1990 Appropriation		FY 1991 Estimate		Increase or Decrease	
	FTE	BA	FTE	BA	FTE	BA
Budget Authority	68	$3,123,000	68	$3,170,000	---	+$47,000

1991 Authorization.................................. Indefinite

Purpose and Method of Operation

This activity supports the overall direction and management to the Centers for Disease Control, which includes management policy, program planning and evaluation, science policy and review, equal opportunity, public affairs, biosafety, legislative programs, international cooperation, and planning for the domestic reactions in the event of chemical and/or biological emergencies or threats. In addition to this overall administrative direction, the Office of the Director provides leadership activities for the Agency so as to assure the delivery of excellent preventive health services to the Nation.

Funding levels for the past five fiscal years were as follows:

1986	$2,959,000
1987	3,161,000
1988	3,066,000
1989	3,058,000
1990	3,123,000

Rationale for the Budget Request

The skills of many differing disciplines and the utilization of valuable resources are required to carry out the missions assigned the Centers for Disease Control. The specific objective of this activity is to coordinate these disciplines and resources in a manner that focuses on both the missions of the CDC and responsible stewardship of the resources appropriated for those missions.

Effective and efficient administrative management is provided to all the Centers, Offices, Institute, and staff elements of the Centers for Disease Control.

Other goals are to:

- Assure there is an effective and coordinated prevention approach throughout the country and to plan for meeting the Year 2000 Prevention Objectives for the Nation.
- Maintain liaison within and outside the Federal Government in matters relating to prevention and occupational safety and health.
- Maintain a focal point to provide national leadership in prevention and occupational safety and health.
- Ensure that the programs of the agency are efficiently managed and internally and externally coordinated.
- Continue safety management and other activities to ensure the safest and most effective use of the Centers' laboratories.
- Provide safe and adequate facilities for the operations of CDC.

Summary of Changes

	FTE	Amount
Increases:		
Built-in increases for pay raise effective January 1990, within grade, FICA, FERS, and one extra day of pay........................	---	$208,000
Decreases:		
Equipment - absorption of 1/2 of the pay raises effective January 1990, and other unfunded built-in increases	---	-161,000
Net Change:	---	+47,000

Preventive Health and Health Services Block Grant

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Alabama	$1,424,555	$1,404,595	$1,404,595
Alaska	309,099	306,291	306,291
American Samoa	47,673	47,087	47,087
Arizona	1,031,735	1,026,040	1,026,040
Arkansas	799,560	788,124	788,124
California	5,989,845	5,951,378	5,951,378
Colorado	1,091,571	1,079,871	1,079,871
Connecticut	1,305,584	1,286,777	1,286,777
Delaware	164,181	162,303	162,303
District of Columbia	703,144	692,797	692,797
Florida	2,579,824	2,572,037	2,572,037
Georgia	2,738,138	2,708,351	2,708,351
Guam	198,954	196,527	196,527
Hawaii	703,428	694,911	694,911
Idaho	328,061	323,560	323,560
Illinois	2,096,373	2,059,764	2,059,764
Indiana	1,502,822	1,478,189	1,478,189
Iowa	991,854	974,572	974,572
Kansas	842,988	831,205	831,205
Kentucky	1,203,210	1,184,391	1,184,391
Louisiana	2,628,855	2,592,326	2,592,326
Maine	807,242	796,437	796,437
Maryland	1,682,478	1,661,454	1,661,454
Massachusetts	2,444,042	2,407,751	2,407,751
Michigan	3,557,329	3,500,255	3,500,255
Minnesota	2,273,756	2,242,475	2,242,475
Mississippi	1,310,941	1,292,273	1,292,273
Missouri	2,240,889	2,209,133	2,209,133
Montana	597,771	589,237	589,237
Nebraska	1,507,727	1,486,412	1,486,412
Nevada	330,013	328,375	328,375
New Hampshire	1,290,727	1,274,817	1,274,817
New Jersey	2,590,339	2,553,359	2,553,359
New Mexico	1,263,587	1,248,266	1,248,266
New York	6,192,955	6,097,556	6,097,556
North Carolina	2,436,424	2,406,588	2,406,588
North Dakota	230,737	227,201	227,201
Northern Mariannas	35,727	35,280	35,280

Ohio	4,081,673	4,017,118	4,017,118
Oklahoma	837,847	826,673	826,673
Oregon	634,575	625,359	625,359
Pennsylvania	4,301,455	4,233,975	4,233,975
Puerto Rico	1,404,951	1,384,459	1,384,459
Rhode Island	427,607	421,583	421,583
South Carolina	1,092,960	1,080,154	1,080,154
South Dakota	208,628	205,471	205,471
Tennessee	1,445,181	1,425,550	1,425,550
Texas	3,536,786	3,511,995	3,511,995
Trust Territory (excl. NMI)	99,672	98,757	98,757
Utah	856,090	846,383	846,383
Vermont	245,238	242,085	242,085
Virginia	1,806,556	1,786,447	1,786,447
Virgin Islands	157,540	155,481	155,481
Washington	874,105	865,581	865,581
West Virginia	813,558	799,696	799,696
Wisconsin	1,755,492	1,729,418	1,729,418
Wyoming	204,948	201,850	201,850
TOTAL	$84,259,000	$83,176,000	$83,176,000

New Positions Requested

Epidemic Services- Infant Health Initiative	1991		
	Grade	Number	Annual Salary
Epidemiologist (MCH)..............	GS/GM-14	1	$ 50,342
Epidemiologist (Perinatal)........	GS/GM-13	2	85,202
Epidemiologist (MCH)..............	GS/GM-13	2	85,202
Geneticist........................	GS/GM-13	1	42,601
Epidemiologist (Behavioral).......	GS/GM-13	1	42,601
Public Health Advisor.............	GS/GM-13	2	85,202
Statistician......................	GS/GM-13	1	42,601
Public Health Analyst.............	GS-12	2	71,650
Nutritionist......................	GS-12	1	35,825
Public Health Advisor.............	GS-12	1	35,825
Epidemiologist (Nurse)............	GS-12	1	35,825
Statistician (Health).............	GS-12	2	71,650
Computer Programmer................	GS-11	2	59,782
Computer Programmer................	GS-9	1	24,705
Program Assistant.................	GS-7	1	20,195
Secretary (Typing)................	GS-6	1	18,174
Clerk (Typing)....................	GS-5	2	32,610
Clerk Typist......................	GS-4	1	14,573
		25	$854,565

Human Immunodeficiency Virus (HIV)	Grade	Number	Annual Salary
Epidemiologist	GS/GM-14	2	100,684
Medical Epidemiologist	GS/GM-14	4	201,368
Engineer	GS/GM-14	1	50,342
Information Specialist	GS/GM-13	1	42,601
Behavioral Scientist	GS/GM-13	3	127,803
Program Analyst	GS/GM-13	2	85,202
Public Health Advisor	GS/GM-13	6	255,606
Computer Analyst	GS/GM-13	2	85,202
Health Scientist	GS/GM-13	1	42,601
Public Health Analyst	GS/GM-13	2	85,202
Health Education Specialist	GS/GM-13	2	85,202
Surveillance Specialist	GS/GM-13	1	42,601
Epidemiologist	GS/GM-13	4	170,404
Behavioral Epidemiologist	GS/GM-13	1	42,601
Medical Epidemiologist	GS/GM-13	3	127,803
Information Specialist	GS-12	1	35,825
Program Analyst	GS-12	2	71,650
Technical Information Specialist	GS-12	1	35,825
Communications Specialist	GS-12	1	35,825
Social Marketing Specialist	GS-12	1	35,825
Public Health Advisor	GS-12	2	71,650
Public Health Analyst	GS-11	4	119,564
Public Health Advisor	GS-9	6	148,230
Budget Analyst	GS-9	1	24,705
Public Health Advisor	GS-7	3	60,585
Program Assistant	GS-7	1	20,195
Secretary	GS-6	2	36,348
Staff Assistant	GS-6	4	72,696
Secretary	GS-5	6	97,830
Travel Clerk	GS-5	1	16,305
Subtotal		71	2,428,280
C.O. (Medical Epidemiologist)	CO-04	1	23,663
Total		72	2,451,943

	1991		
Infant Health Initiative	**Grade**	**Number**	**Annual Salary**
Epidemiologist (MCH)..............	GS-14	1	$ 50,342
Epidemiologist (Perinatal)........	GS-13	2	85,202
Epidemiologist (MCH)..............	GS-13	2	85,202
Geneticist........................	GS-13	1	42,601
Epidemiologist (Behavioral).......	GS-13	1	42,601
Public Health Advisor.............	GS-13	2	85,202
Statistician......................	GS-13	1	42,601
Public Health Analyst.............	GS-12	2	71,650
Nutritionist......................	GS-12	1	35,825
Public Health Advisor.............	GS-12	1	35,825
Epidemiologist (Nurse)............	GS-12	1	35,825
Statistician (Health).............	GS-12	2	71,650
Computer Programmer...............	GS-11	2	59,782
Computer Programmer...............	GS-9	1	24,705
Program Assistant.................	GS-7	1	20,195
Secretary (Typing)................	GS-6	1	18,174
Clerk (Typing)....................	GS-5	2	32,610
Clerk Typist......................	GS-4	1	14,573
		25	$854,565

Detail of Permanent Positions

	1989 Actual	1990 Estimate	1991 Estimate
ES-6	1	1	1
ES-5	2	2	2
ES-4	9	10	10
ES-3	1	2	2
ES-2	2	4	4
ES-1	2	2	2
Subtotal	17	21	21
GS/GM-15	156	168	168
GS/GM-14	305	329	337
GS/GM-13	572	617	654
GS-12	505	545	560
GS-11	451	486	492
GS-10	5	5	5
GS-9	305	329	337
GS-8	45	49	49
GS-7	249	269	274
GS-6	313	338	345
GS-5	310	335	344
GS-4	55	60	61
GS-3	11	12	12
GS-2	7	8	8
GS-1	4	4	4
Subtotal	3,293	3,554	3,650

Detail of Permanent Positions

	1989 Actual	1990 Estimate	1991 Estimate
Grades established by Act of July 1, 1944 (42 U.S.C. 207):			
Assistant surgeon general grade 8, $56,992 - $78,192	3	3	3
Assistant surgeon general grade 7, $47,354 - $69,012	4	4	4
Director grade, $35,100 - $60,631	186	186	186
Senior grade, $28,069 - $49,471	238	238	238
Full grade, $23,663 - $41,368	200	200	201
Senior assist. grade, $21,989 - $35,777 .	96	96	96
Assistant grade, $19,174 - $26,546	10	10	10
Junior assistant grade, $16,646 - $20,941	-	-	-
Subtotal	737	737	738
Ungraded	485	485	485
Total permanent positions 1/..........	4,532	4,797	4,894
Unfilled positions, end-of-year	-465	-	-
Total permanent employment, end-of-year .	4,067	4,797	4,894

1/ Worker-trainee Opportunity Program position included above	(22)	(23)	(23)

ADVISORY AND ASSISTANCE SERVICES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

CENTERS FOR DISEASE CONTROL
Salaries and Expenses

(In Millions of Dollars)

Account Title and Symbol		1989	1990	1991
Salaries and Expenses: No. 75-0943-0-1-550				
I. Contractual Services				
Individual Experts & Consultants	B.A.	0.646	2.075	2.075
	Oblig.	0.646	2.075	2.075
	Outlays	0.646	2.075	2.075
Studies Analyses & Evaluations	B.A.			
	Oblig.			
	Outlays			
Management & Professional Support Svcs.	B.A.	1.100	2.550	2.550
	Oblig.	1.100	2.550	2.550
	Outlays	1.100	2.550	2.550
Engineering & Technical Services	B.A.			
	Oblig.			
	Outlays			
Subtotal	B.A.	1.746	4.625	4.625
	Oblig.	1.746	4.625	4.625
	Outlays	1.746	4.625	4.625
II. Personnel Appointments	B.A.		0.115	0.115
	Oblig.		0.115	0.115
	Outlays		0.115	0.115
III. Advisory Committee	B.A.		0.446	0.446
	Oblig.		0.446	0.446
	Outlays		0.446	0.446
TOTAL	B.A.	1.746	5.186	5.186
	Oblig.	1.746	5.186	5.186
	Outlays	1.746	5.186	5.186

Centers for Disease Control
Advisory and Assistance Services

The Centers for Disease Control (CDC) utilizes advisory and assistance services to enhance our efforts in the prevention and control of disease. The services are used to prevent unnecessary disease, disability, and death by expanding our knowledge in disease control and environmental and occupational safety and health.

Advisory and assistance services are used by all program entities at CDC. Many studies and analyses, such as the Task Force on Pneumoconosis, the Immunization Management Seminar, and the Assessment of HIV, are necessary to prevent and control disease outbreaks. The dissemination and exchange of information with the advisory committees, such as the Immunization Practice Advisory Committee and the Mine Health Research Advisory Committee has given CDC a broader base of knowledge in disease control and environmental and occupational safety and health.

Appropriate use of advisory and assistance services is assured through internal reviews that are in place throughout the procurement, contracting, and personnel appointment process.

WEDNESDAY, MARCH 21, 1990.

ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION

WITNESSES

FREDERICK K. GOODWIN, M.D., ADMINISTRATOR

ENOCH GORDIS, M.D., DIRECTOR, NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM

LEWIS JUDD, M.D., DIRECTOR, NATIONAL INSTITUTE OF MENTAL HEALTH

ELAINE JOHNSON, DIRECTOR, OFFICE FOR SUBSTANCE ABUSE PREVENTION

STEPHEN W. LONG, DIRECTOR, DIVISION OF FINANCIAL MANAGEMENT

BENY PRIMM, M.D., DIRECTOR, OFFICE FOR TREATMENT IMPROVEMENT

CHARLES R. SCHUSTER, PH.D., DIRECTOR, NATIONAL INSTITUTE ON DRUG ABUSE

DENNIS P. WILLIAMS, DEPUTY ASSISTANT SECRETARY, BUDGET, DHHS

ALAN LESHNER, DEPUTY DIRECTOR, NATIONAL INSTITUTE OF MENTAL HEALTH

Mr. NATCHER. At this time we take up the budget request for fiscal year 1991 for the Alcohol, Drug Abuse and Mental Health Administration. We have before the committee Dr. Frederick K. Goodwin.

Dr. Goodwin, as the Administrator, would you first tell us who you have with you at the table?

Dr. GOODWIN. Yes, Mr. Chairman. Mr. Dennis Williams, Deputy Assistant Secretary for Budget will be joining us. He has not arrived yet.

On the far right is Dr. Enoch Gordis, Director, National Institute on Alcohol Abuse and Alchoholism; Dr. Lewis Judd, Director, National Institute on Mental Health; Dr. Beny Primm, Director, Office for Treatment Improvement; Mr. Steve Long, who is the Budget Officer for ADAMHA; Dr. Charles Schuster, Director, National Institute on Drug Abuse; and Dr. Elaine Johnson, Director, Office for Substance Abuse Prevention.

Mr. NATCHER. Thank you. We will be pleased to hear from you.

Dr. GOODWIN. I am pleased to be here to discuss our 1991 budget request, which totals $2,800,000,000. We feel this will allow us to deal with the diverse areas this agency is accountable for, some of the most important public health issues in our country.

Our primary and defining mission is the conduct and support of specific research on the mental and addictive disorders. That program responsibility is tightly linked to our responsibilities for prevention and the improvement of treatment. Those two programs, prevention and treatment improvement, are focused on drug abuse in particular.

It is important to us to be able to transfer our research-based knowledge into front line clinical practice and the service systems. We have considerably enhanced capacity to do that through the new leverage we have over the block grants.

DRUG ABUSE

One half of our budget, $1,400,000,000, as you can see in the handouts we have given the committee, is devoted to drug abuse issues. We intend to pursue the Federal response to the drug abuse crisis by a close integration of our basic and clinical research with our research demonstrations and finally with the block grant. We see this as a continuum of function.

I will get back to the research in a minute, which is our most important issue. First I wanted to talk about the expansion of the block grant. We will be describing that. The expansion is in the Office of Treatment Improvement. Dr. Primm is here to answer questions about that very important component of ADAMHA.

The leadership that is reflected in our recruitment of Dr. Primm is also reflected in Dr. Elaine Johnson, who came to OSAP from the National Institute of Drug Abuse with a long career touching on research in drug abuse. That has allowed her to be alert to the potential for linkage between OSAP and NIDA. We see OTI and OSAP as an important bridge between the research community and substance abuse prevention and treatment.

The bridge goes two ways, not only to generate hypotheses for research but to sharpen the research focus, that is to give the researchers some sense of where the gaps are in knowledge out in the field, and also of course for the prevention and treatment of this disorder through prudent programs, wherever possible based on what is known from the research base.

BLOCK GRANT

The block grant will total $1,300,000,000 in the President's request. This is the second year of an increase, the biggest increase of course coming from 1989 to 1990.

It is very important that the block grant programs recognize the high frequency of comorbidity, the coexistence of mental and addictive disorders. Comorbidity is more the rule than the exception. We intend through block grants to provide assistance and emphasize the importance of converging treatment of substance abuse with treatment of mental illness across the spectrum.

One thing that will allow us to assess that issue and others is the set-aside from the block grant, which as you know was legislated by Congress two years ago, and that has enabled us to begin data collection activities, technical assistance activities and service systems research which are very important components in closing the gap between university-based research and the real world of practice and prevention. Most of that set-aside—which will, by the way, equal in our proposal 5.7 percent of the block grant—the bulk of that will be in data collection. The next largest component is services research and the smallest component is technical assistance.

RESEARCH

In terms of the nearly $1,000,000,000 in our budget for research, this includes $230,000,000 for AIDS and the remainder for some very high priorities that I want to touch on very briefly.

We have had in the 1970s, in the addiction and mental illness fields, a gap in knowledge development. That has been closed because of the care with which Congress has funded our research and funded it well in the last eight years. That has allowed us to close the knowledge gaps. We are now in a position to take advantage of substantial expansion in the brain sciences and the behavior sciences to apply these new understandings of brain and behavior to the pressing problems of the mental and addictive disorders.

Mr. **Natcher**. We will have a brief recess while we answer the call to vote.

[Whereupon, a vote recess was taken.]

Mr. **Natcher**. The committee will come to order.

CHILD AND ADOLESCENT MENTAL HEALTH

Dr. Judd, how much of your 1991 research request focuses on areas highlighted in the child and adolescent mental health plan?

Dr. **Judd**. Mr. Chairman, first let me indicate how enthusiastic the entire Institute and the field are about this new research plan. We feel mental disorders occurring in children and adolescents are one of the underserved areas in this Nation, with 12 percent of children and adolescents suffering from these disorders.

At the instruction of this committee last year our National Advisory Council launched a very imaginative, broad scientific attack directed toward understanding and treating these disorders. Currently we have allocated for fiscal year 1991 approximately $111 million for the child research area.

However, this amount falls somewhat short of what the plan actually requests.

Mr. **Natcher**. Dr. Judd, what recommendations does the plan make for five-year spending patterns?

Dr. **Judd**. For fiscal year 1991, the first year of the plan, the recommendation is for approximately $152 million. This escalates across the next four years to a total of $283 million in fiscal year 1995. This annual augmentation in focusing on child and adolescent mental disorders is approximately $33 million a year, Mr. Chairman.

Mr. **Natcher**. Doctor, do you plan to set aside a certain share of your new research grant money for child and adolescent mental health or to issue a special request for applications?

Dr. **Judd**. First of all, in allocating research money, the institute gives highest priority to the quality of the science. We combine that with high-priority areas such as the National Plan for Schizophrenia Research, Decade of the Brain Plan and now the National Plan for Research on Child and Adolescent Mental Disorders. There have been a number of new initiatives the Institute has begun to develop and put out in the field to begin to get the plan rolling in the first year.

SCHIZOPHRENIA PLAN

Mr. **Natcher**. How far along in the path recommended by the National Schizophrenia Plan would you say your research has come, Doctor?

Dr. **Judd**. We are at the beginning of what we see as the third year of implementation with regard to the National Plan for Schizophrenia Research. The plan calls in 1991 for $191 million. However, the budget as allocated at this point in time recommends $99 million.

There is, as you see, a significant shortfall. Within the monies that have been appropriated by this committee for the Institute, we believe that we have made a very good beginning, but there is still more to do.

PREVENTION

Mr. **Natcher**. What does prevention mean in the context of mental health aside from avoiding undesirable economic and family situations?

Dr. **Judd**. Well, prevention means the same thing with regard to mental disorders as it does with regard to so-called physical or medical illnesses. As you know, prevention is divided into primary and secondary prevention. Primary prevention consists of procedures and attempts to try to prevent an illness before it happens. Currently there is no scientifically proven way in which we can prevent mental illness or mental disorders.

However, there is some indication that there may be some promising opportunities in the near future with regard to conduct disorder and preventing the escalation of conduct disorders in children, to the point where they have antisocial personality disorders or are involved in criminal activity. We believe there are some ways we have identified that we can try. We are ready. In fact, this very day an announcement will arrive in the field indicating an interest in research demonstrations with conduct disorders and with regard to teenage suicide as well.

RURAL HEALTH INITIATIVE

Mr. **Natcher**. Tell us about the rural mental health initiative that you began this year.

Dr. **Judd**. This has been a high priority of the Institute this last year and now emerging toward the end of 1990.

One thing we know about mental illness in rural areas is that the prevalence rate is identical to the urban areas of America. Evidence shows that people living in the Farm Belt indicate that stress and the sequelae of stress is one of their highest concerns, second only to exposure to toxic chemicals. One quarter of the people in rural areas have classic symptomatology.

We have created a new office at the Institute that is overseeing and coordinating our new efforts in this regard. We have put out a new Request for Applications (RFA) that is inviting science and scientists to focus on rural areas. We have indicated it as a priority in all our RFAs. We are excited about this new direction. In fact, our council is about ready to hold a series of field hearings out in the rural area in southwestern Minnesota to begin to get better information with regard to rural mental health problems.

Mr. **Natcher**. Thank you, Dr. Judd.

Now, Dr. Goodwin, we come back to you. We will be pleased to hear from you at this time.

ADAMHA RESEARCH

Dr. **Goodwin**. When you had to leave we were talking about the research programs of the agency. I was noting our appreciation for the support that Congress has given to the research budgets of ADAMHA in the last eight years substantially closing the gaps that were developed in the 1970s.

I might note, however, that an article published in Science magazine just this month states there still is an overall gap in civilian research and development across this country as a percentage of GNP. What the study showed was that the percentage of GNP that this country puts back into research and development has sunk from a high of 2.8 percent in 1963 to a low today of only 1.7 percent. While the rest of the developed countries of the world are going up in the percentage of GNP that they are investing in research, the United States continues to slip in this arena.

Although relative to ADAMHA's past, we are doing better, we are not as a country doing so well in the overall strength in our R&D budget. West Germany and Japan have passed us and reached the 2.7 level we were at in 1963 while we are down to 1.7.

Be that as it may, our own research has been successful and given us a strong neuroscience base upon which we can build and apply to the whole host of clinical problems ranging from the tragedy of schizophrenia to the tragedy of drug abuse and alcoholism. We are using the Child and Adolescent Mental Disorders plan to drive that research in the NIMH. We are using the NIMH Decade of the Brain plan to drive much of the neuroscience, particularly in the NIMH.

At the NIAAA, the focus on basic and clinical genetic studies remains important, particularly to identify subtypes of alcoholics who have strong genetic components. The treatment matching trial, a multisite study to match patients with specific treatments, is another priority of the NIAAA. In fact, the alcohol services community has gradually begun to accept and appreciate the importance of research on the treatment of alcoholism.

The National Institute on Drug Abuse, which has had the largest increase in the last few years in keeping with the emergency of the drug abuse crisis, is focusing heavily on the neurochemistry of addiction. This depends heavily on the animal studies of addiction. It under pins a program targeted toward the use of medication to block the craving for drugs.

Although psycho-social approaches lead the way, unless we find a way to deal with the craving that drops so many people out of treatment, the psycho-social approaches alone will not do the job. We must buy time to have people readjust their lifestyle and help them with the craving. This is an agencywide effort.

NIDA is doing treatment research demonstrations which are very important field trials. In those demonstrations they will be collaborating with Dr. Primm and the Office for Treatment Improvement.

That concludes my opening statement. I will be happy to take your questions.

[The information follows:]

STATEMENT OF THE ADMINISTRATOR
ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before you to discuss the President's fiscal year 1991 budget request for the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA).

The request totals $2.8 billion, of which $1.3 billion is distributed directly to the States through block grants. Another $1.5 billion is requested to support research, treatment, and prevention activities focused on mental illness, alcoholism, and drug abuse; this amount includes $50 million for new grants in the "Community Partnership" drug abuse prevention program; $7 million for continuation of a rural mental health research initiative begun in 1990; and $72 million for programs targeted on the needs of homeless persons who suffer mental and addictive disorders. There is $1.4 billion in this budget for drug abuse, a 15 percent increase over last year. Also, the request includes $230 for ADAMHA's AIDS programs.

This budget will further our capacity, and that of the States and communities, to respond decisively and effectively to the evolving patterns and consequences of substance abuse in this country. Our request also anticipates the remarkable opportunities open to us to improve treatments for mental and addictive disorders on the basis of scientific findings regarding the fundamental biological and behavioral mechanisms involved in disorders which are estimated to cost the Nation $50 billion annually for clinical treatment and support services, and more than four times that amount in indirect costs associated with premature mortality, reduced productivity, crime, and social welfare programs.

We are pleased to report that our most recent data document a dramatic, continuing decline in the use of illegal drugs by the population-at-large. At the same time, we are very concerned by a parallel trend toward the increasingly pathological, addictive use of substances including crack, potent new designer drugs, and the combined use of alcohol and other drugs by a smaller number of users, with consequences that constitute a national tragedy.

While the destructive use of drugs is not limited to any subgroup of Americans, the severity of consequences is not distributed evenly. The toll of drug use among young male members of the Nation's urban underclass is unconscionable; the impact on the unborn children and infants of women of child-bearing age--and, specifically, the recent phenomenon of "crack babies"--is heartbreaking; the effects of drugs on the one-in-six persons who are mentally ill at any given time, or homeless, or who carry HIV, the AIDS virus, confound the already precarious situations of these specially vulnerable individuals.

The broad shift toward more dangerous patterns of drug use challenge us, as a Nation, to recognize that developing more effective treatments and strategies for preventing addiction requires a substantial and sustained research effort--and to realize that an integral part of that effort must entail a high priority on translating knowledge generated through research into improved treatment and prevention services.

A key element of ADAMHA's response to this challenge is an intensified commitment to our primary scientific mission--to generate new knowledge and to translate that knowledge into clinical practice. To that point, I would express appreciation to the members of Congress for your support, particularly over the past 7 to 8 years, of our research programs. Although the depth and quality of the knowledge base among and within the fields of mental illness, alcoholism, and drug abuse remains uneven, we are finding that advances in one field increasingly often inform the hypotheses and speed the pace of work in other fields. And, as sophisticated epidemiological research defines the frequency of comorbidity, or co-occurrence, of mental and addictive disorders, practical applications of such cross-fertilization of the knowledge base are more apparent.

Recently, we created an Office for Treatment Improvement in the Office of the Administrator to advance ADAMHA's ongoing national leadership initiatives to translate our knowledge base into improved treatment services. We are fortunate to have recruited Dr. Beny Primm, who is among the Nation's pre-eminent authorities on drug abuse treatment, to head the new OTI.

Under Dr. Primm's guidance, OTI extends to the clinical treatment arena the quality of dedicated expertise which ADAMHA currently possesses in the primary prevention sphere, embodied in the Office for Substance Abuse Prevention (OSAP). The OTI, I should note, also administers funds passed through ADAMHA in the form of the ADMS Block Grant and the Mental Health Services to the Homeless Block Grant, and monitors State accountability to its provisions.

The OTI and OSAP bridge the traditional research sector with the front lines of substance abuse treatment and prevention services, primarily through the application of new knowledge in the form of demonstration projects which apply research-based findings in large populations and which nourish research by identifying promising interventions which need further testing and refinement.

Because ADAMHA's research institutes--the National Institute of Mental Health, the National Institute on Drug Abuse, and the National Institute on Alcohol Abuse and Alcoholism--also support demonstration projects, let me anticipate questions that may arise regarding the division of responsibility between these two components of the Agency.

The demonstrations conducted by OSAP and OTI are designed to try out new approaches or methods that are based on state-of-the-science knowledge and theories. If one views our strategy as a "crash program," these projects represent our effort to test, immediately and in real-world settings, the feasibility of new prevention and treatment service models. The evaluation built into each project is intended to answer the specific question of whether a given approach "works" here and now.

Demonstrations conducted by the Institutes, on the other hand, are intrinsically of a research nature. That is, while these projects also are designed to translate "laboratory knowledge" into clinical uses, they involve rigorously matched controls for experimental variables in the new approach. Another key difference is that while OTI and OSAP demonstrations assess for project-specific effectiveness, the Institute's evaluations are designed to determine methodically if an approach that works in one setting can be applied with equal success to other settings and other populations.

Both demonstration approaches expand our treatment and prevention capacity while they are expanding and enriching our knowledge base. An example is seen in the District of Columbia initiative, under which NIDA will conduct research, in specially funded treatment clinics, designed to develop and demonstrate new model programs effective in treating drug abuse and establish appropriate combinations of treatment methods and approaches.

I should emphasize again that I am describing a two-way bridge, wherein research both informs and is informed by community experiences.

I also want to emphasize our commitment to basic and clinical research which will benefit all persons who suffer alcoholism, drug abuse, and mental illness. As you are aware, President Bush last July signed into law the congressional resolution declaring January 1990 to mark the advent of the "Decade of the Brain." His proclamation recognizes the enormous potential of the brain sciences to advance our understanding of some of the most serious disorders threatening the physical and mental health of the Nation--schizophrenia, major depression, Alzheimer's disease, childhood disorders, and alcoholism and other drug disorders.

Two new NIMH research strategies--the National Plan for Research on Schizophrenia and the Brain, and the National Plan for Research on Child and Adolescent Mental Disorders will serve as mileposts for our progress throughout this decade. Under the first of these initiatives, NIMH-funded studies recently have provided new insights into the basic genetic control and regulation of dopamine, a chemical messenger in the brain that is excessively active in schizophrenia.

In ongoing work at the NIAAA, computerized tomography is being used to characterize the actual physical changes that occur in brains of alcoholics. CT scans of age-matched alcoholic subjects and nonalcoholic controls reveal substantial, atypical-for-age damage in the brains of alcoholics, suggesting special susceptibility of the cortex to neurotoxic effects of alcohol. Thus, imaging technologies may be useful in the early diagnosis of alcoholism, and may lend themselves to the development of new treatment approaches for alcoholism.

As our understanding of the biological bases and sequelae of drug addiction has deepened, the identification, development, and large-scale clinical trials of medications designed to act specifically on brain neurochemical systems that are linked to tolerance and craving for drugs has emerged as NIDA's number one priority.

Crack cocaine is one of the most addictive substances yet known and, because of an uncontrollable craving for cocaine, abusers tend to strongly resist available treatments. Recent results of a NIDA-funded study indicate that the medication flupenthixol offers singular promise in treating crack dependence. Outpatients receiving this medication experienced a rapid, marked reduction in cocaine craving and use, as well as a lessening of cocaine withdrawal symptoms. We hope to replicate these encouraging preliminary findings in a larger, double-blind, placebo-controlled study now being developed.

Finally, our budget request includes $12 million for the final subsidy payment for Saint Elizabeths Hospital. This subsidy is to assist the District of Columbia in assuming full operational responsibility for the hospital as authorized by Public Law 98-621.

I will be pleased to answer any questions you may have.

Mr. NATCHER. Thank you, Dr. Goodwin.

DRUG ABUSE FUNDING

Now, despite severe budget constraints, Congress has increased drug abuse funding over the last several years. We face difficult spending choices on this subcommittee and many worthy programs are competing for resources. Canyon Tell us with confidence that the system can wisely spend the drug abuse funding already provided plus additional funds that you are requesting, for 1991.

Dr. GOODWIN. I presume you are referring, Mr. Chairman, to the treatment system. If we are referring to the treatment system, I think it is fair to say that the capacity of the Federal Government, in particular of NIDA, to have the necessary data to understand what is going on in that treatment system, was not there until 1987. The Drug Abuse Act of 1988 restored the Federal Government's authority to collect data in the treatment system.

We have only begun to get the information that is necessary to fully answer the question. What is going on out there and how much it needs improvement. We do know enough to know that the treatment system needs considerable improvement. That improvement includes much more research, there are still too many gaps in what we know, we are still doing too many things without an adequate knowledge base to support them.

It also needs considerable technical assistance from the Federal Government to improve this. We feel the block grant set-aside allows us to get there.

OBSTACLES TO DRUG ABUSE TREATMENT

There are a number of enduring obstacles in drug abuse treatment, not the least of which is the so-called NIMBY syndrome, "not in my backyard". We are going to need the cooperation of the state and local governments in order to deal with this problem of placement of drug abuse centers in communities.

We also have a lack of qualified people to deal with this. We are concerned as the states expand the capacity of the treatment system, we are concerned that we are able to keep up with the training of competent individuals. It would be irresponsible for us to simply put slots in place without ensuring that there are people out there who are trained and skillful in the delivery of substance abuse treatment.

We feel from NIDA's estimates that the rate at which the treatment system can expand is probably 20 to 25 percent a year, most of that limit is set by the limit in providing qualified people to conduct the treatment. The quality of treatment is uneven, as Dr. Primm can tell you. There are some treatment systems that use state-of-the-art methodology that is the best we have to offer from research. There are others getting by on a very thin basis and simply employing treatment at what I would call a minimal level.

There is still substantial segregation of our drug abuse treatment system from the general health system. One thing experts like Dr. Primm know about is the capacity to get and maintain somebody in treatment. To prevent them from dropping out is a function of how much health services you provide them along with their drug abuse treatment.

We have considerable problems with bricks and mortar. We don't have enough buildings, literally, for them around the country, even if we had more accessibility in the neighborhoods.

Finally, we have the tendency for drug abuse treatment centers to be built in isolation from the rest of the treatment system, which puts them in isolation and makes it more difficult to retain and recruit the professionals we need. Perhaps Dr. Primm would like to comment.

Mr. NATCHER. We will be glad to hear from you, Dr. Primm.

TARGETING TREATMENT

Dr. PRIMM. We have started two initiatives out of the Office for Treatment Improvement that targets cities and critical populations. In the crisis cities grant initiative or what we call the target cities grant initiative, we are looking for cities that can demonstrate that they have a high degree of drug abuse within their population. We will fund those cities to enhance their systems that are already in place so they can make drug abuse treatment more attractive to those individuals who happen to be suffering from addiction.

We also have a critical population grants initiative. There are categorical grants to target individuals and specifically address their needs by increasing primary medical care in already existing drug treatment centers. And we want to establish a better patient/counselor ratio so that patients can get better care and more emphasis on their particular problems.

Patient tracking systems will be improved under the critical population grants and will also provide some vocational and educational services to individuals. The problem in drug treatment programs is the drop outrate, the failure of patients to spend the amount of time absolutely necessary for individuals to benefit from programs. The longer people stay in programs and rehabilitation, the better the outcome for those individuals.

Mr. NATCHER. Thank you.

DRUG ABUSE DATA

Dr. GOODWIN. Dr. Schuster would like to describe the data system we put in place in order to characterize the answer to your question more carefully.

Mr. NATCHER. Dr. Schuster, we will be glad to hear from you at this time.

Dr. SCHUSTER. Thank you, Mr. Chairman.

We have been very concerned with the absence of data regarding the numbers of clients seeking treatment, the treatment capacity, the existence of waiting lists as well as the types of treatment that are being provided. As Dr. Goodwin mentioned, because of set-aside funds from the Anti-Drug Abuse Act, we have been able to replace, and in many cases, improve many of the data collection systems that existed prior to 1981 to provide this data.

We are now in a position to assess the total number of treatment centers, the nature of the treatment programs, the numbers of clients they are seeing, the length of time people are staying in treatment, and, to as great an extent as possible, follow them in terms of outcome so that we will be in a position to assess need as well as the quality of care that is being given and its effectiveness.

Thank you.

Mr. **Natcher**. Thank you, Dr. Schuster.

DRUG TREATMENT COSTS

What is the average per-patient cost of drug treatment funded by the Federal Government?

Dr. **Goodwin**. That varies with whether it is in-patient or out-patient maintenance treatment. The rough estimate is about $5000 per slot. Perhaps Dr. Primm would like to expand on that.

Dr. **Primm**. It could vary anywhere from $3- to $6000 depending upon the kind of services offered, whether they are as Dr. Goodwin says, out-patient or in-patient services. On average, it costs about $5000 per treatment slot to provide out-patient treatment services. In-patient treatment services can go anywhere from $14- to $18,000.

EFFECTIVENESS OF DRUG ABUSE SPENDING

Mr. **Natcher**. Dr. Goodwin, when we had our overview hearing before the full Committee on Appropriations we had before the committee Mr. Darman, the Director of OMB. I asked him what we have to show for our drug abuse spending. Here is what he said, Dr. Goodwin: "I personally cannot from my perspective allege that there is any certain connection between this increased investment and our ability to really turn the tide here."

What would you have to say about that, Dr. Goodwin?

Dr. **Goodwin**. I can only speak about the drug abuse spending on the demand reduction side, not the interdiction or law enforcement side. I do think we have seen substantial effects of the prevention efforts, that is to say both the Household Survey from NIDA, and the High School Survey from NIDA, indicate over the last three years there has been a 35 percent reduction in drug use among the mainstream of America.

There are still substantial pockets of problems that have not shown such declines. We have seen within that decline a somewhat worrisome shift from a declining general use to an increase in the proportion of users who are addicted. So, emphasis needs to shift from overall prevention to focused prevention among high-risk populations and to the development and application of new and better treatments.

We begin to see in recent NIDA data some optimistic signs even in the more hard core areas, e.g., the rate of positive tests for drugs in the blood and urine has begun to show reduction in some jurisdictions. The DAWN data has begun to show a leveling off in the last four quarters of the number of drug-related, particularly cocaine-related, emergency room visits. I think there is a beginning of trends downward in certain areas, yet there is a persistence of problems as well.

It is important to point out in this context that we have to be careful about the timeframe we are measuring ourselves by. If one starts a prevention effort one should not expect to see the impact of that within the same year or two or even five years. We know that the earlier you intervene the more likely you are to prevent. It is easier to prevent the initial use of drugs than it is to reverse it once the pattern becomes established.

The medication development program, as in research practices, has begun to have payoffs in areas that are now confined to people in research studies. As we take those advances and translate them into practice through Dr. Primm's office and through our translation of research to the community, we will see that beginning to show up. I think you will notice if you look back at other epidemics like polio, and others we conquered, the time it takes to do it is not measured in fiscal years.

TREATMENT ON DEMAND

Mr. NATCHER. Dr. Goodwin, is treatment on demand a goal which has been endorsed by the President's national drug control strategy? What would it cost to implement treatment on demand?

Dr. GOODWIN. The concept of treatment on demand is one of the more confused areas in our public discourse on drug abuse treatment. One thing that is not widely understood is that anybody who is an expert in the drug abuse system knows that not all drug abusing patients are willing to come into treatment and willing to accept it. NIDA estimates are that between 25 and 50 percent of drug addicts who are known to be out there are willing to accept treatment. That doesn't mean they will stay in it once they are recruited but it means at least they will come in initially.

If you use that estimate, that roughly half the patients out there—the roughly 4,000,000 addicts estimated in the country as in need of treatment—and say 2,000,000 will accept treatment, and you use the current estimate of the number of slots in the public system now, then we might have a shortfall of somewhere between 400,000 to 600,000 addicts who would not be provided treatment.

Since we can get 2½ persons treated per slot per year roughly, that means that that shortfall could be met with an expansion of somewhere between 160,000 and 200,000 slots across the country. That indeed would require more money. As you know, the drug abuse treatment budget, the Federal budget, has gone up nearly double in the last two years.

We feel that the pace at which this growth occurs is as important as the ultimate target of it. We don't want it to grow so fast that we acquire shortages of treatment personnel. We think it could get done. We think we are getting much closer to it. We hope the States are improving and enhancing and enlarging their systems at the same rate as the Federal Government. Even if you take conservative estimates of what the States are doing, we are closer to the target than one often hears.

Mr. NATCHER. Mr. Conte, I yield to you.

Mr. CONTE. Thank you, Mr. Chairman.

INTRODUCTORY REMARKS

I might say at the outset, Dr. Goodwin, that you really packed the house. This is the biggest crowd we have had since Elizabeth Taylor showed up.

I want to extend my warmest greetings to you and your outstanding crew. They have all done a top-notch job this past year and I look forward to working with you all this year as well.

And I want to especially thank Dr. Elaine Johnson and Dr. Bob Schuster for all the help you have given us in getting Holyoke the assistance they needed to care for pregnant addicts. I can't think of a more worthy project than this.

I also want to take the time to welcome Dr. Beny Primm of the ADAMHA family. You have done magnificent work in New York and we on the committee have high expectations for you here—and no doubt, you will meet them with flying colors.

Dr. **Primm**. Thank you, sir.

Mr. **Conte**. Dr. Gordis has also done a great job in making the medical community and the public aware of the dangers of alcoholism and how basic research can come up with workable solutions.

Dr. Judd has done an outstanding job with the Decade of the Brain. His enthusiasm for the Decade rivals my own. I was most impressed with your implementation plan and I thank him for working with me and my staff on this most important project.

DECADE OF THE BRAIN

NIMH recently prepared a major Decade of the Brain report to Congress which described progress thus far, and the many opportunities which now exist in NIMH research. Can you share with us NIMH's major programs which are in place or planned to begin implementation of the Decade of the Brain plan?

Dr. **Goodwin**. Let me start by expressing on behalf of the entire neuroscience community at ADAMHA and NIMH the deep appreciation that the neuroscientists and the clinical disciplines that depend on neuroscientists have for your leadership and vision in establishing the Decade of the Brain. It has caught everybody's imagination both in the scientific community and the patient advocacy groups. It has been a singular moment for areas which in the past have been somewhat neglected. I would like to ask Dr. Leshner to try to describe the details of the Decade of the Brain for you.

Mr. **Leshner**. Thank you, Dr. Goodwin. I am very pleased to have the opportunity to speak to you directly about the Decade of the Brain, which we see as a major opportunity to capitalize on the exponential growth in the neurosciences in the last couple of years and make a push toward the future. The importance of this has been recognized in a variety of ways. Let me mention some activities that NIMH and our sister Institutes and ADAMHA have been doing.

There will be in July of this year a major symposium sponsored by NIMH with the Institute of Medicine to honor the Decade of the Brain. We are in the process of developing with the Library of Congress an ongoing lecture series to educate the public about some of the findings about the brain and developments to look for in the future. The research program NIMH has outlined has many components. Some have to do with an establishment of a variety of research centers focusing on neuroscience.

For example, we now support four and are about to fund the fifth center to study neuroscience and mental disorders. We will be establishing basic neuroscience centers, one focusing on molecular biology in the near future. We are hoping to begin a program of establishing a series of centers around the country dedicated to functional brain imaging and mental illness, since brain imaging is being used more and more.

The PET scan was based on the research of a NIMH researcher, Louis Sokoloff. We are in the process of establishing brain imaging centers around the country. We have issued a series of requests for proposals for important related neuroscience issues. Some have to do with theoretical, cognitive and behavioral neurosciences.

You have heard of some of the psychotherapeutic medication developments. We have been supporting an analysis of the potential for developing a major national resource—a neural circuitry database. As as a resource for the entire field, that database would be a compilation of all that is being learned about the brain and all of its intricacy. That study is being done by the Institute of Medicine. We are expecting a report from them during the next calendar year.

Let me finish by mentioning that, as I hope you know, there is now a growing impetus across the Federal Government to make the Decade of the Brain into a national initiative. Under the leadership of the White House Office of Science and Technology Policy we have established a working group that involves a large number of Federal agencies and departments to work together to frame a series of initiatives to speed the rate of growth.

Mr. **Conte**. I can't tell you how pleased I am. That really is great news.

NATIONAL NEUROCIRCUITRY DATA BASE

Last year we discussed a major initiative in the Decade of the Brain regarding the development of new computer technologies and new software for the neurosciences. Would you give us an update on this?

Mr. **Leshner**. Let me mention a couple of things. The major event has to do with the national neurocircuitry database I just mentioned, which will benefit from the confluence of computer technology and advances in the sciences. Another area is the increased use we will be able to make of the computer-generated or computer-analyzed images that we get both from magnetic resonance imaging and from the SPECT scan, which is a computer regeneration of what is going on in the living awake brain.

BRAIN GRANT COLLEGES

Mr. **Conte**. Doctor, while I have your attention, I hear you are developing "brain grant colleges" as part of the initiative. Can you tell us what that is?

Mr. **Leshner**. The notion is a relatively straightforward one that is in the very early formative stages. Basically it is analogous to what has been done in the sea lands and land grant programs. The idea is to try to seed a number of institutions around the country with major neuroscience centers and facilities so that we would have the opportunity to bring together many researchers and do the next generation of research.

BALANCE IN RESEARCH FUNDING

Mr. Conte. Doctor, there has been great emphasis placed on increased funding for substance abuse programs, particularly drug abuse. What effect has this had on funding for research in other areas such as mental health? And has this large increase in funding for substance abuse programs impacted adversely on the research programs of ADAMHA, and in particular the National Institute of Mental Health?

Dr. Goodwin. I will take that one, Mr. Conte.

NIMH had last year a 15.3 percent increase in their budget. This year it was more modest, 6 percent. It is true that the drug abuse research budget has gone up faster than the NIMH budget. We have an ongoing concern about the balance between the research and the nonresearch. Indeed, when we look at the overall percent of research it represents about 1 percent of the cost of treating addictive disorders. We certainly cannot let it get below that.

We have some long-term rebuilding to do in our research. However, as I said earlier in response to Mr. Natcher, I think this committee and the Congress has been recognizing the gaps that developed in mental health and addiction research in the 1970s. We have indeed had budget increases over the past few years. In the last two years the total research budgets of ADAMHA have gone up by 33 percent, which is substantially ahead of our sister agency NIH that had not had the funding gaps in the 1970s.

So we are watching that issue. We are concerned about it. Obviously the budget has to compete with other issues regarding deficit reduction, et cetera. At least within the ADAMHA family, at this point we feel that we are striking a reasonable balance.

NIMH BUDGET REQUIREMENTS

Mr. Conte. Doctor, we have been getting a lot of calls and letters in support of $750,000,000 for the NIMH budget in fiscal year 1991. Does this amount represent your professional judgment budget? Can you describe the major differences between that budget and the current fiscal year 1991 request?

Dr. Goodwin. Let me speak as a professional and a psychiatrist who spent 25 years in neuroscience research. I feel the research base that applies to mental illness is ready to absorb substantially more money. The main problem is that whatever increases come have to come with stability. They cannot be up and down. You cannot maintain high quality investigators in a field that bounces up and down.

That has been a problem in some of the ADAMHA institutes. All of the ADAMHA institutes have had that problem over the years. That is why there are some gaps we need to close. In terms of the details of the professional judgment budget I could ask Dr. Leshner to comment on that.

Mr. Leshner. In summary, were additional funds available we would be able to do, for example, fuller implementation of the Decade of the Brain initiative, the National Plan for Schizophrenia

Research, and the National Child and Adolescent Disorders which is a major new initiative described in the Plan we sent to Congress last week.

Mr. CONTE. Thank you. Thank you, Mr. Chairman.

Mr. NATCHER. Mr. Stokes.

INCIDENCE OF ADM DISORDERS AMONG MINORITIES

Mr. STOKES. Dr. Goodwin, to what extent do the diseases and conditions under your agency's mandate—mental illness and alcohol and drug abuse—disproportionately affect the minority population in the United States?

Dr. GOODWIN. I think it is important to distinguish the issue of minority status from the issue of socio-economic status. The evidence with regard to drug abuse, for example, is that the higher rates of drug abuse among minorities are explicable by the higher rates of drug abuse among people living in poverty or living in the under class.

There is indeed, as you know from the Urban Institute studies, a distinction between poverty as a financial state and the under class as a multi-generational change of social values. There are differences in health areas, not only in the ADM areas but in health areas. For example, blacks have a higher rate of hypertension that is somewhat independent of their socio-economic status.

I myself have had some concern about carelessness with which we too easily link socio-economic status with minority status. That indeed would be unfair to the great majority of minorities in this country who are very upwardly mobile in the middle class.

HYPERTENSION AND DRUG ABUSE

There was an interesting research finding that you might find particularly interesting, Mr. Stokes, from NIDA. In animal studies, animals who have hypertension are, for some interesting reason we don't understand, more susceptible to the effects of cocaine. Now whether that would translate into what happens to clinical populations that have higher rates of hypertension, as blacks indeed do. It is worth pursuing in clinical studies to see whether that might be an issue—the differential impact of cocaine on blacks may relate to blood pressure.

But my basic feeling is that the data we have, that the racial or ethnic differences that we find in our drug patterns and mental illness patterns, are primarily if not exclusively explained by socioeconomic differences.

ADVANCES AFFECTING MINORITIES

Mr. STOKES. In terms of racial and ethnic minorities are there any recent advances that you can highlight for us?

Dr. GOODWIN. The major advances I think have come in the efforts of OSAP and its prevention arenas that target high risk youth. A disproportionate proportion of minorities are included in the high risk youth programs. OSAP and the capacity in the prevention research area that NIAAA and NIDA have sponsored for prevention research, have shown that certain kinds of interventions can indeed reduce drug abuse among high risk youth even in impacted areas.

In the research arena, I have mentioned one finding which offers some promise for selecting out reasons for cocaine sensitivity among blacks. There are also studies in rural cultures and Dr. Leshner referred to this, the issue of differential response to stress among rural populations. I wonder if you would like to hear from my colleagues about their areas of responsibility.

Mr. STOKES. I will be pleased to hear from them.

ETHNIC DIFFERENCES IN ALCOHOL EFFECT

Dr. GORDIS. Mr. Stokes, I think the major points in answer to your question were addressed in Dr. Goodwin's comments. It is important to note the difference between minority status and socioeconomic status. On the other hand, there are areas where there seem to be genuine ethnic differences with relation to alcohol and its complications which are not dependent on socio-economic status at all. But it is somewhat complicated by the mix of certain innate vulnerabilities plus the extra vulnerability that poor socio-economic status poses.

Reguardless of the cause, we know the black population seems to have a higher incidence of alcohol related cirrhosis, given an equal drinking history.

The contribution that alcohol makes to cirrhosis we don't point of view of liver disease and epidemiology, understanding the differences in the black population is a matter of great concern in our research agenda.

In relation to the fetal alcohol syndrome we know there too that black infants are likely to be more susceptible to that than white infants, by a factor of about three or four. The reasons for that likewise are not clear. We are not certain whether alcohol alone, is the responsible or whether it acts in concert with various factors that go along with poverty, such as poor nutrition, and inadequate prenatal care, which can also cause birth defects.

A year ago Dr. Sokol, in Detroit found that there may be a genetic vulnerability in Fetal Alcohol Syndrome babies, related to a variant of one of the enzymes that metabolize alcohol. It is an interesting finding, but it has to be verified. Indian and Alaskan native women seem to be more vulnerable to cirrhosis than men with a similar drinking history . The Asian populations, both Asian-Asian and Asian-American, have an abnormality that may be protective. Many of them flush and become uncomfortable when drinking alcohol. This protects them from alcoholism because they never overindulge. One of the great triumphs of molecular biology has been the identification of the mutatim in the alcohol-metabolizing enzymes which cause this discomfort. Work is going on at the Institute to look at the issues concerning the high rate of alcoholism among some, but not all, Native American tribes.

Mr. STOKES. Thank you.

Dr. GOODWIN. Dr. Schuster.

NIDA EFFORTS AFFECTING MINORITIES

Dr. **Schuster**. First of all, let me say our current budget with emphasis on minority related issues amounts to about $148,000,000.

Mr. **Stokes**. What percentage of the overall budget is that?

Dr. **Schuster**. Our total budget is $407,000,000. So it is almost 40 percent. I would emphasize the fact that when we talk about this problem we have to recognize that all of our efforts are designed to improve treatment of all forms of substance abuse disorders which are generic and cut across all racial groups.

Our treatment research is of the highest priority because it impacts everyone. In that regard I would emphasize that the tragedy of AIDS in this country has, as you know, disproportionately affected minority groups with 25 percent of the AIDS victims being black and approximately 15 percent being Hispanic which is double the percentage that they represent in the general population.

Therefore, all of our efforts in the development of medications for the treatment of intravenous drug use are really going to impact on that issue a great deal. I think it is very important that we recognize that all of the treatment and all of the activities that we are engaged in, particularly with pregnant women and high risk individuals, those who are at high risk for intravenous drug use, are going to have an incredible impact on the minority populations.

Mr. **Stokes**. Dr. Johnson, did you want to add something?

Dr. **Goodwin**. If we are going to move away from research to some programs in prevention and treatment improvement, I think we will have something important to tell.

Mr. **Stokes**. I believe my time has expired. If I get another round, I will be glad to come back to you.

Mr. **Natcher**. Mr. Early.

NIMH PAYLINE

Mr. **Early**. Dr. Goodwin, what is the projected pay line for 1991 for mental health research?

Dr. **Goodwin**. 120.

Mr. **Early**. What is the general cut off paint for new and competing research grants and how does that compare to 1990 and 1989?

Dr. **Goodwin**. It is going to go down to 120. It was 150 in 1989. It is going down even in the face of a budget increase over the two years, 33 percent over two years. This is probably due to several factors, one, the length of the grants is getting longer and we have encouraged that.

The other is that there has been a substantial expansion in the base of the research the Institute is doing. The Institute has expanded its portfolio considerably in the neuroscience area particularly.

We have also had more special congressional interest in areas and mandates that take up a certain portion of the budget.

Mr. **Early**. Doctor, the pay line is going down. You are not doing as much with each specific grant.

Dr. **Goodwin**. As we expand the scope, it takes a great deal of resources to keep the traditional research going.

Mr. **Early**. You say you don't have the tools to do everything you possibly could do, right?

Dr. **Goodwin**. Part of this is the problem of increases that occurred in the previous year which were reasonable.

PERCENT OF APPROVED GRANT PAID

Mr. **Early**. I want to talk about what your budget is. I am not talking about philosophical things. This has gone on too long.

What percentage of approved grants will be funded under the budget request, and how does that compare to the last two years?

Dr. **Goodwin**. The percentage of approved grants paid will go down from 33 percent last year to 20 percent in the coming year.

DOWNWARD NEGOTIATIONS

Mr. **Early**. That is a decrease of almost 50 percent. You are telling us how many opportunities there are in this field. Are your mental health grants funded at levels recommended by the review groups? Are you operating under some sort of a funding plan?

Dr. **Goodwin**. There is a downward negotiation of approximately 10 percent in NIMH.

Mr. **Early**. The directors of these Institutes have told us that 10 percent was a critical point where it would affect productive science. Do you agree with that?

Dr. **Goodwin**. Yes.

NIMH BUDGET

Mr. **Early**. Your statement and your budget justifications speak to the remarkable opportunities in the mental health field. When I look at your budget, I see that there is only a $12,000,000 increase, and $10,000,000 of that is for AIDS and HIV, as I understand it.

Dr. **Goodwin**. That is right.

Mr. **Early**. So you only have a $2,000,000 increase for all other NIMH program areas, right, doctor?

Dr. **Goodwin**. I think it is $28,000,000 altogether for the non-AIDS programs. I am sorry, the total is $20,000,000. You take out $10,000,000 for AIDS. So that leaves about $18,000,000 for the other, total research.

Mr. **Early**. I have reservations about that but I will accept what you say. So that is less than a 1 percent increase. If you had $516,000,000 for all of NIMH and you are talking about——

Dr. **Goodwin**. Including AIDS the increase is 6 percent. Without AIDS, it is 4.7 percent.

Mr. **Early**. We have to talk percentages or dollars. When you go back and forth you sound like OMB.

Dr. **Goodwin**. No, I was trying to follow you, Mr. Early. The dollar increases are both AIDS and non-AIDS. They were $18,000,000 and $20,000,000.

Mr. **Early**. I am talking total NIMH. It says $515,782,000 to $527,786,000. Is that accurate?

Dr. **Goodwin**. Yes, that is right. Our totals show a $26,000,000 increase which is 6.17 percent.

Mr. **Early**. From those figures that is a $12,000,000 increase, isn't it? From $515,000,000 to $527,000,000.

Dr. **Goodwin**. I think you are looking at the total budget, not just the research budget.

Mr. **Early**. That is what I am looking at. Don't you think that would be the most appropriate thing to speak to?

Dr. **Goodwin**. It depends on the question. If we are talking about the capacity for research, we should stick with research. There are things in the rest of the budget such as protection and advocacy, clinical training.

Mr. **Early**. If that is true, what you are saying is that it will take away from those programs. If we don't talk about your whole budget and you tell me there is a $26,000,000 increase, and the whole institute is up $12,000,000, you are telling this committee that you are taking it away from other areas, right?

Dr. **Goodwin**. I thought you were asking me strictly about research.

Mr. **Early**. Doctor, you did say in your justification that there are remarkable opportunities in the mental health field, didn't you?

Dr. **Goodwin**. Yes.

RESEARCH TRAINING

Mr. **Early**. Let's look at that chart. That displays the ADAMHA full time training positions. You talked about getting off the roller coaster. You are not on a roller coaster. You have a road map to oblivion. When does the roller coaster start going up with this budget?

Dr. **Goodwin**. We have felt the training budgets have not kept pace with the needs in the research system. We would appreciate your help with that.

Mr. **Early**. Doctor, you have to carry the water for the Administration. That is one on a roller coaster.

Dr. **Goodwin**. We have given the Institutes the authority to move money from their research account to their research training account. Now their research training is reflective of the judgment of the Institutes as to the allocation of admittedly scarce resources.

DECADE OF THE BRAIN

Mr. **Early**. I listened to Dr. Leshner's comments about the Decade of the Brain. It is such a small increase. There is basically no increase for the Decade of the Brain, is there, Doctor?

Mr. **Leshner**. There is some increase in neuro-science research but it does not meet the Decade of the Brain plan.

Mr. **Early**. Is there any increase basically? It is so small; does it keep up with inflation?

Mr. **Leshner**. Yes, sir.

Mr. **Early**. Percentage wise?

Mr. **Leshner**. There is a 6 percent increase in the neuro-science program.

Mr. **Early**. That is a statistician's 6 percent. That is not a legitimate 6 percent increase in this budget?

Mr. **Leshner**. There are numerous opportunities.

FEDERAL RESEARCH BUDGET

Mr. **Early**. Yes, and you are not putting the money into them. We are not putting our money where our mouth is. Isn't that right, Dr. Goodwin, when you say there is so much more we can do?

Dr. **Goodwin**. Before you got here I made the point that we have seen a decline in this country in research and development as a percentage of GNP. We in the health field are in that same declining pattern.

Since the mid-1960's we have been putting in less and less; more and more into short-term solutions and less into long-term solutions.

Mr. **Early**. I will tell you the views of this Member: in basic research with regards to mental health or alcoholism, the only one who helps is Uncle Sam. There aren't many money-making opportunities for the private sector.

Dr. **Goodwin**. That is the point. In the mental and addictive disorders the Federal Government is about 85 percent of the action as compared to the general physical disorders in which half comes from other sources and half comes from the Federal Government.

Mr. **Early**. Evidently mental health is not a priority of this Administration.

Dr. **Goodwin**. In the last five years the research budgets of the ADAMHA Institutes have grown at a rate three times the other Institutes on the average. That is correcting a very serious gap that happened in the 1970's.

Mr. **Early**. When you say it has grown, are you growing with the opportunity?

Dr. **Goodwin**. We have not caught up with the opportunities yet. We are growing compared to our slower position of the 1970's which everyone recognizes in retrospect was not a good decade for mental and addictive research.

Mr. **Early**. We tell everyone about the big threat regarding crack with pregnant women, crack and pediatric AIDS and we are not doing anything. There is no expansion in that field. I understand you have developed a national plan on research in child and adolescent disorders.

Would you briefly summarize the elements of this national plan?

Dr. **Goodwin**. I will ask Dr. Leshner to do that. I should note in relation to the comment about crack, the NIDA institute has been the fastest growing of any of the three. $40,000,000 of that is directed at medication development specifically to develop a treatment for crack.

Mr. **Early**. You say it is the fastest growing of the three. That is because the other two are not growing. You are telling me that it is having less trouble than the other two because they are having a lot of trouble.

Dr. **Goodwin**. I was trying to put it in context. In my professional opinion we could use a good deal more. Compared to our sister agency NIH, the ADAMHA, in fairness to this committee and the Senate committee, ADAMHA has done better.

In terms of my professional judgment as a career investigator, I think the neural sciences are critical. I think the public health costs are scandalous. I think we are spending 1 percent of that cost to study and understand it. I think the treatment system needs a lot more information than it currently has. I hope the overall process of government and the issue of deficit reduction and all the other pressing domestic needs will allow that increase over the next few years to occur.

Unless we do more in research, we are going to be continuing to fight these terrible problems with a lack of knowledge.

Mr. **Early**. Doctor, do you agree we spend money to save money in research on mental health and alcohol?

Dr. **Goodwin**. In mental health and alcohol, of course, in the case of mental health——

Mr. **Early**. I have to stay within 10 minutes. Do we or don't we?

Dr. **Goodwin**. Yes, we do. I was going to give the example of lithium which was developed from research. Lithium has saved about $12,000,000,000 in this country. Before lithium patients were spending one-fourth of their life in the hospital at a cost of $40,000 a year on average.

Now they are being treated at less than $900 a year as out patients. The research on lithium was a tiny fraction of that pay off.

Mr. **Early**. I agree totally. That is why I am so frustrated with this budget. Thank you, Mr. Chairman.

Mr. **Natcher**. Mr. Porter, I yield to you.

RELAPSE AMONG ALCOHOLICS

Mr. **Porter**. Thank you, Mr. Chairman.

Dr. Gordis, last year we discussed NIAAA work on studying relapse among alcoholics. Your goal is to prevent relapse in alcoholics. Can you bring us up to date on what has been accomplished?

Dr. **Gordis**. The issue of relapse in treatment of alcoholism is a major medical issue. It is easy to get the patients off the alcohol in the detox unit in a few days. The issue we are dealing with, of course, is how to prevent craving for alcohol which occurs spontaneously and without predictability after detoxification. It is craving during the sober months that leads to a high relapse rate among most but not all alcoholics.

We are trying to address the problem of craving in two principal ways. The first has to do with maximizing the effectiveness of the kinds of treatments we use now. The second approach is to try to develop new treatments, especially in the area of medications development, which will be the fruit of our neuroscience research.

In the first category, trying to maximize the results of what we currently do, there are several avenues. The first is to apply the most rigorous standards to evaluation of treatment outcome.

The kinds of standards I am talking about are the kinds of standards which have been long common in areas such as heart disease and cancer, appropriate trials, randomization, matching and so on.

So when you come to your conclusions, you can be confident that your results are valid. So, the first part of this is to have the kind of evaluation of what we do now so we know where we stand.

As part of this enterprise we also need to develop better instruments for outcome measurement. One of the problems we have in alcoholism treatment is the unreliability of self-reports that we get from the patients about the extent of their drinking. Denial, and sometimes memory failure, diminish the reliability of self-report data.

For that purpose, we have a program for developing objective markers which will testify to the level of blood alcohol over a period of several weeks, even if the patient were to come for examination in the abstinent state. Progress is being made, and it is taking place in several laboratories with a variety of chemical techniques.

The final goal in studying treatments that are currently available, of course, is the issue of treatment matching. That means that instead of offering patients a whole buffet of treatments of various sorts, all of which have their merits, we can save time, money and inconvenience if we know which components of treatment were better for which category of patients. To accomplish that, one has to be able to define the categories of patients and match them to treatments. The collaborative study in treatment matching, which this committee supported, has been under way for two or three months. During the first six months to a year, the steering committee is meeting to define the instrumentation for measurements and the kinds of patients that will enter into the study. We hope in three to four years, we will have more information that will help prevent relapse.

The second approach to improving our ability to prevent relapse is to develop medications. The neuroscience discussions during the last half hour are pivotal to developing new medications for the treatment of alcohol, because what we are talking about is the relief of craving. In order to do that, we have to understand the neurochemistry and neurophysiology which underlay craving. I am confident that during the next few years, we will have some decisive interventions in that regard.

CHRONIC FATIGUE SYNDROME

Mr. **Porter**. I hear a great deal of optimism in your answers. Dr. Goodwin, you have been looking into chronic fatigue syndrome.

Dr. **Goodwin**. This is work being done in collaboration with NIH Institutes. There is a lot of confusion about what this means. There are some studies indicating that certain anti-depressant drugs have efficacy.

However, the optimism about identifying the viral agent for chronic fatigue syndrome has been somewhat tempered because of the clinical heterogeneity of the very mixed population. It is a very mixed population.

Dr. Leshner, did you want to describe any of the programs?

Mr. **Leshner**. No, I think you have summarized it very well.

Dr. **Goodwin**. NICHD, NIMH and NIAID are all working collaboratively, intramural and extramural, on this. If you look at the history of discovery of new syndromes, the progress to date has been relatively rapid, and the first step is to say what it is and what it isn't, and they are in the middle of that now.

ANOREXIA NERVOSA

Mr. **Porter**. What about research on anorexia nervosa?

Dr. **Goodwin.** Research on anorexia nervosa has been building on what we have learned over the years on research in the depressive disorders, particularly because anorexia nervosa seems closely related to the very severe forms of depression. There is emphasis in NIMH on eating disorders in general.

The NIMH budget will spend $7,300,000 on eating disorders. Those overlap with the addictive disorders, and we hope that the comorbidity research that is being conducted with the block grant set-aside that NIMH is taking the lead on, particularly epidemiology, will shed light on the relationship between eating disorders and the particular form of appetite disorder we call drug abuse.

Mr. **Porter.** What role does NIMH play in disseminating information to people who treat anorexia nervosa?

Mr. **Leshner.** We have a fairly extensive information dissemination program through a national clearinghouse. We also support a clearinghouse in Washington that feeds information to and from a variety of advocacy and constituency groups.

The Institute recently published a pamphlet called "Useful Information on Anorexia Nervosa and Bulimia." Overall, the Institute spends about $10 million on a variety of dissemination programs.

NIDA OUTREACH DEMONSTRATIONS

Mr. **Porter.** Dr. Schuster, the budget justification includes a $20,000,000 cut in NIDA funding for drug user outreach and demonstration projects. In Illinois, these funds have provided very successful initiatives aimed at contacting users on the street and getting them to change their behavior. These programs are just beginning to produce data that will allow for prevention models to be used nationwide.

Why are you de-funding the demonstration projects and programs? Can't further data be drawn from these and other demonstration projects, and don't you consider such research important?

Dr. **Schuster.** We are very pleased with the outcome of our outreach demonstration project. This was a project that was devoted to bringing information and attempting to change the behavior of intravenous drug users who are not in treatment and their sexual partners.

It exists in 60 different sites in 48 different cities and is largely a program where ex-drug users under the direction of social scientists go out into the community to bring people information about the risks that they are taking by sharing needles, and engaging in unprotected sex.

These are demonstration projects. As a research institute we feel that it is our role to develop new knowledge and demonstrate its efficacy. We encourage the service agencies to take over delivery of the demonstrated service if that community feels that those services are still needed at that particular site.

I would emphasize the fact that we believe as a research institute, that we should not continue the service aspects of demonstration programs in perpetuity. We bring this to the attention of the service-giving agencies and then rely upon them to take over.

We are in contact through the Association of State and Territorial Health Officers and the National Association for State Alcohol and Drug Abuse Directors to look for the appropriate agencies within the States to take over these functions.

We feel that we have completed, to a certain extent, the demonstration and that now it is time for the service agencies to take over those projects. This may be possible with the new funds provided in the Block Grant.

Dr. GOODWIN. The Office for Treatment Improvement is including outreach aspects in many of its announcements in the crisis cities and the target areas.

Mr. PORTER. Dr. Schuster, you agree that the spreading of new AIDS cases among IV drug users continues?

Dr. SCHUSTER. Correct.

Mr. PORTER. And that there is a need for the service-giving agencies to pick up where you have left off——

Dr. SCHUSTER. Yes. Two or three of the States that we have been contacting through NASADAD have agreed they will do this through an increase in the block grant which provides funds for AIDS prevention. We are continuing research to further improve our ability to contact these hard-to-reach populations and to learn how to assist them in the attitudinal and behavioral changes that they have to go through in order to be able to alter their risk-taking behavior.

PREVENTION

Mr. PORTER. Dr. Goodwin, if someone said that the prevention side of your budget seems to be slighted what would your answer be to that?

Dr. GOODWIN. In terms of percent increases, I would have to say that that is not the case. In the drug area the prevention budget has actually gone up by—if you take the two-year period with the up and down that is more meaningful, prevention has gone up 134 percent. Research has gone up 57 percent in that same period, and the treatment programs have gone up 96 percent.

So, actually, our prevention efforts have been going up at a faster rate than our research or our treatment efforts in drug abuse. Those are all large increases in the drug abuse area.

Mr. PORTER. What about alcoholism?

Dr. GOODWIN. The Office for Substance Abuse Prevention includes a focus on alcohol as well.

Mr. PORTER. That includes anorexia?

Dr. GOODWIN. Only to the extent that it would co-mingle with substance abuse.

Dr. JOHNSON. The programs at the Office for Substance Abuse Prevention clearly have a focus on alcohol and other drugs. In terms of health issues, the legislation requires that we focus our attention on those areas, too, particularly as related to the alcohol and drug problem.

So, we have a number of projects focusing on all those disorders.

Dr. GOODWIN. The drug abuse figures show the largest increase in prevention, the overall prevention budget of the agency has tripled in two years. It is the largest, fastest-growing part of the budget of ADAMHA.

Mr. PORTER. Thank you.

DEVELOPMENT OF DRUG BUDGET

Mr. NATCHER. What was your budget request for the drug programs?

Dr. GOODWIN. The original request, I think it was 800—I might have to submit that for the record in the interest of time. For overall drug abuse, treatment, research, and prevention——

Mr. NATCHER. Yes.

Dr. GOODWIN. It is actually a little bit less than—our original drug abuse budget request was $890,000,000. That was what we submitted. Then there was a discussion with ONDCP and, of course, the Congressional action in the Byrd-initiated legislation. The final revised Presidential request took into account the Strategy, the national plan evolved by the Office of National Drug Control Policy, and the Congressional initiatives.

Our budget request went up by 55 percent from the agency's original request, much of that being in the block grants and in the new Office for Treatment Improvement and some of that in the prevention programs.

So, this was one of those situations where the original request from the agency was actually lower than the final request, although we did in fact agree with those enhancements that resulted from the national plan.

RESEARCH TRAINING

Mr. NATCHER. Doctor, how many research traineeships does the recent National Academy of Sciences study recommend for your Institutes and how does that compare to your 1991 request?

Dr. GOODWIN. Our 1991 request was for 1534 full-time training positions, and that is about 18 percent below the National Academy recommendation. We have been giving a good deal of attention within the agency to this. As I mentioned earlier, we have given the Institutes the authority to transfer funds from their research accounts to their research training accounts, in order to allow this program to grow.

We think it is a very critical program, because the agency is trying to open up new fields, and whenever you are trying to open up new fields such as AIDS and new areas of neuroscience and medication development, it requires research training.

Our major concern about the research training budget is not the immediate issue this year, but what has happened over the long term. We are very encouraged by the interest that this committee is showing in enhancing our research training capacity.

Mr. NATCHER. Nearly 80 percent of the research trainees supported in your 1991 request would be allocated to Mental Health. Is this an appropriate balance among the three Institutes, Doctor?

Dr. GOODWIN. I think it reflects the relative size of the mental health research field, and the history of that field compared to the smaller fields in drug abuse research and in alcohol research. I think the scope of the problems of the addictive disorders, however, would suggest that we are going to have to do a great deal more in training researchers than we are currently doing.

One reason we are allowing the Institutes to shift money to those research training accounts is to enable them to do that.

BALANCE BETWEEN CENTERS AND PROJECT GRANTS

Mr. **Natcher**. The number of research centers funded by your agency would increase from 52 in 1988 to 83 in 1991. Since centers are expensive and difficult to discontinue once funded, are you concerned that this increase, Doctor, in the number of centers will limit funding for project grants in later years?

Dr. **Goodwin**. It is always a considerable question in the balance of these more stable programs as opposed to the investigator-initiated programs. In putting more money into centers, we are recognizing the effects of a critical mass that you get by having multiple-disciplined investigators working in one center.

Of course, we have a long history with the center. Our largest center is our intramural research centers, particularly mental health, and also alcohol and drugs. The intramural programs have proven to be very cost-effective, producing more research per dollar than the investigator-initiated mechanisms do.

However, the building of these new centers does imply that we need some stable growth in our research budgets to protect those new and competing grants, which are the lifeblood of new ideas in research.

DRUG TREATMENT RESEARCH

Mr. **Natcher**. Dr. Schuster, you have placed a major emphasis on the development of medications to fight drug addiction. The process of developing and testing medications will take quite a few years. In the meantime, do you think that you are allocating sufficient resources to studying non-drug treatments?

Dr. **Schuster**. First of all, we are very fortunate in that we are currently testing some medications which were developed for other disorders, but which we believe may be useful in the treatment of cocaine addition and even heroin addition. So that we are further along than we might have been if we were starting *de novo* in the medication development program.

Let me emphasize the fact that our medication development program is a program which is devoted to changing the brain chemistry so that individuals are no longer obsessed with the idea of thinking about their drug experiences. They would not be driven by the compulsive need which they have for the drug, to seeking out the drug and taking it again. Medications are not a cure. They simply allow the individual to be free from this obsessional thinking, and this compulsive drug use, and then the real job of the interventions take place.

In some individuals who have other forms of mental disease, this will involve professional help in terms of psychotherapy. We are currently conducting research in this area.

Other kinds of behavioral interventions allow the individual to be put into circumstances where his essentially weakened will, because of his experience as a drug user, are given external and environmental props to assist him. We call these contingency management procedures. We are doing research on these techniques as well.

Social interventions are also being developed and used, as are relapse prevention strategies. I think it is important to emphasize that all of these things are part of our overall treatment program. We are working on them all simultaneously.

I think that there is a great preoccupation with our medication development program, because it is new, and promising a great deal. We agree with that, but not to the exclusion of other kinds of therapeutic approaches which are essential for full rehabilitation.

MEDICATIONS DEVELOPMENT

Mr. **Natcher.** Your budgets since 1988 have described the promise of various drugs to block cravings for cocaine. When do you expect one of these drugs to be approved for use in actually treating cocaine addiction?

Dr. **Schuster.** The development of a medication for the treatment of any medical disorder is a long and involved process. The FDA estimates that from the synthesis of a chemical in the beginning, to the time that a new drug application is approved, is an average of 100 months—over eight years.

We were fortunate in having certain medications developed for other purposes which appear to have some efficacy for the treatment of cocaine addiction, a drug called carbamazepine, which is an anti-convulsant medication, and flupenthixol, which was developed as an anti-psychotic and an anti-depressant, and several others.

We hope to have definitive information on the effectiviness of these medications for the treatment of cocaine addiction and craving for cocaine within two years. However, that is assuming that everything goes right. I would not want to say that I can promise that, but certainly that is a minimum period of time before we will have definitive information.

NIAAA PRIORITIES

Mr. **Natcher.** Aside from a focus on genetics, Dr. Gordis, what are your Institute's other research priorities?

Dr. **Gordis.** We have several major priorities in addition to the large collaborative genetics study which has just begun. The first is neuroscience, which was addressed in relation to NIMH activities by some of the other members. Our activities in neuroscience are a major component of our basic science agenda.

We are trying to deal with questions which sound simple, but are really quite profound and elusive, why some people drink, get drunk, or develop a dependence upon alcohol; why some people feel craving when they don't have alcohol; and how alcohol damages the brain, damages memory, and other intellectual functions.

These questions deal with the profoundest questions in neuroscience, so we have a neuroscience initiative which tries to answer them. The best way to talk about that is to talk about both the ideas and the tools.

The ideas have to do with applying the cutting-edge techniques of neuroscience to these alcohol-related questions. This involves nerve chemistry, the study of reward mechanisms, that is, what is so rewarding about drinking that people wish to continue it? We are learning about the effect of alcohol on various receptors and in turn, how the physiology of the receptors is involved in the development of intoxication and of tolerance to alcohol. We are studying the effect of hormones on brain function. The question of anorexia was discussed previously. It is likely that the issues of addiction to alcohol and other drugs share some mechanisms with normal mechanisms of hunger and thirst. The new interest in the neural networks and parallel processing is probably going to play an important role in the way we think about brain functions.

To accomplish the research to answer these questions using those various ideas, we are also using various tools, some of which have been alluded to. I want to emphasize the importance of animal models—whole animals, tissues, individual cells, the tools of electrophysiology and neurochemistry. Important, of course, are the various scanning devices that measure different functions of the brain. Some of the advances in PET scanning, which have been done in the intramural program at NIAAA, involve very interesting methods of superimposing images from one technology on another. One can collate from the same individual, the information drawn from several scanning technologies. That way we can learn more about what is happening in the brain.

The payoff will be better understanding of addiction from the point of view of brain physiology and better intervention, treatment and medication development.

There are other areas which I want to touch on. The first is the large collaborative treatment matching study which I mentioned before. We also are very interested in issues related to alcohol and youth. They have many facets starting from genetic vulnerability on the one hand, to behavioral problems with societal effects, on the other. Our job is to segregate alcohol problems from the general adolescent turmoil and to understand what is the nature of adolescent development. What from the point of view of biology and psychology makes risk-taking so attractive to so many adolescents? In fact, we are hoping to be able to award one center to study adolescent problems some time this year.

We are participating in the initiative to develop new medications which will prevent craving and prevent relapse. That, too, will be the fruit of our neuroscience program.

Mr. NATCHER. Thank you, Doctor.

Mr. Conte, I yield to you.

CO-MORBIDITY

Mr. CONTE. Doctor, many people with mental illness suffer substance and alcohol abuse as well. What is your Institute doing to address these interrelated illnesses? And in your professional judgment, how much is needed to support these projects?

Dr. GOODWIN. You are referring to the problem of comorbidity or dual diagnosis, and the NIMH epidemiology data indicate that comorbidity is a far more serious problem than originally thought.

Not only do 22 percent of patients with mental illness have substance abuse problems, but within that group, those that have the more serious forms of mental illness have rates of substance abuse which approach or even exceed 50 percent.

Likewise, we have evidence that one of the most important, often undetected factors that leads to drug abuse among youngsters is a pre-existing mental disorder. And in fact, the existence of a pre-existing mental disorder among adolescents doubles their likelihood of becoming a drug abuser later on. Therefore, the early detection and treatment of mental disorders becomes a major thrust for substance abuse prevention.

If I were to describe all of the programs of the agency addressing this issue, I would have to include Dr. Johnson's high-risk youth program in the substance abuse prevention area, which includes a focus on high-risk youth who have co-existing psychiatric disorders.

I would include Dr. Primm's having put comorbidity on the top of his list, particularly making sure drug abuse treatment centers have adequate psychiatric and psychological skills to diagnose and treat the concomitant disorders, and then I would have to add some $20,000,000 from the block grant set-aside being run by NIMH to do field studies of this comorbidity problem.

For all of the research programs, as Dr. Gordis said, the neuroscience base for behavior is the same, whether you are talking about the aberrant behavior of mental illness or of an addictive disorder. We have to apply the mechanisms to illness, not starting from a pure illness focus.

I would say that the overall efforts of the three Institutes and the Office for Treatment Improvement and the Office for Substance Abuse Prevention, all have comorbidity as a very high focus of concern.

Whether the effort is enough, no it is not. Whether it is enough to occupy us—it certainly is that, but we could be doing more.

BASIC RESEARCH

Mr. CONTE. Doctor, basic biomedical research, I think, is the best investment we can make in understanding mental disorders and finding better treatments. Can you tell us about the future outlook for molecular genetics and neurobiology in mental health, and what role will the PCR reaction play in your research efforts?

Dr. GOODWIN. As both Dr. Judd and Dr. Leshner have said in response to earlier questions, the excitement about molecular neurobiology and its relevance to mental health is difficult to overstate, and I think it is a very well-taken excitement.

Particularly the genetics issues, the more we understand about the genetic vulnerabilities that make some people respond to environmental stress as an enhancing thing, and for others a destabilizing influence—much of these differences are genetic.

The NIH, with support of Congress, has launched the human genome initiative, which is a major national investment. It is critical that the mental and the addictive disorders make sure that their own internal genetic research keeps up with the development of the human genome. We would not want the mapping of the human genome to occur without parallel developments in the genetics of mental disorder, drug abuse and alcoholism.

The areas that are most advanced and which are most ready to get the fruits of the human genome would be in the field of the depressive and manic-depressive disorders. Emerging areas are in the field of panic disorders, schizophrenia, and the field of early-onset alcoholism.

But we have every reason to think that drug abuse patterns will also prove to have important genetic components. So it is extremely important that our disorders keep pace with the development of human genetics across the health spectrum.

BASIC RESEARCH COSTS

Mr. **Conte**. I think that is a heck of a lot more important than being able to get a supercollider. What do you plan to do in fiscal year 1991 in this field, and what is your professional judgment of the budget both of genetics and the neurobiology programs?

Dr. **Goodwin**. I will ask Dr. Leshner to address the specifics of NIMH.

Mr. **Leshner**. As you know, the NIMH in 1989 began, and has implemented in 1990, a major program looking at the molecular genetics of mental illness. Total support for this effort includes $61 million in genetics and genetics-related research. We have begun a major program that involves 10 connected network sites that will collect information on formative families and perform linkage analyses.

The Polymerase Chain Reaction (PCR) will be a wonderful tool. In my professional judgment, we could easily use another $15 million for genetics, sir.

Dr. **Goodwin**. Perhaps I could ask Dr. Schuster to mention similar efforts.

Dr. **Schuster**. We have been contacted by some of the leading molecular biologists in the country, who have said our emphasis has not been great enough. Over the past few years, we have developed a $35,000,000 research program in the molecular biology area to look at the very detailed effects of illicit drugs and how they act on not just receptors but all of the cascade of neurochemical events that ultimately give rise to addiction.

So, we are heavily involved in the neurobiology and molecular biology of addiction.

Dr. **Goodwin**. At the Alcohol Institute, the programs in molecular biology total about $20 million.

TREATMENT CAMPUSES

Mr. **Conte**. Dr. Primm, you have a great responsibility as the new Director of OTI. The budget has been generous for OTI this year and I hope that you will invest in projects which will do the most with the taxpayers' dollar and help the most people.

Areas all over the country are calling for help in treatment improvement. You should visit the City of Holyoke in my District. You would be impressed by the tremendous need up there for help.

I understand you are considering developing a campus-like program outside the cities to rehabilitate addicts. What progress have you made so far? I heard New York City had some reservations with this idea. Did they want to participate?

Dr. **Primm**. Yes. You may have read in the paper that Lieutenant Governor Stanley Lundeen, who is the Drug Czar in the State of New York has backed off of the large treatment campuses of

10,000 people that were initially suggested to take care of some of the problems in New York State.

We have recommended that there be treatment campuses established of around 500 people. There should be an area adequate enough to permit four or five demonstrations of different modalities of treatment, each using different procedures. The campuses would be a joint effort with the National Institute on Drug Abuse, so that we could do research on the success of each program.

One program on a campus may have people in it who will stay three to six months, another six to nine, another nine to 12, or 12 to 18 months depending on the way that the program would be designed. Then we would measure the outcome of these different approaches.

These programs would share a central intake unit on the treatment campus and would also share primary medical care facilities, food preparation and food supply,

Although we don't have the funds within the Office for Treatment Improvement to fund the treatment campuses this fiscal year, the 1991 budget includes funds for a pilot treatment campus. I would like to see these campuses in operation very soon.

Mr. CONTE. I agree.

Mr. NATCHER. Mr. Stokes, I yield to you.

PROGRAMS FOR MINORITIES

Mr. STOKES. Thank you, Mr. Chairman.

Dr. Johnson, you wanted to respond to my last question.

Dr. GOODWIN. I wanted her to as well.

Ms. JOHNSON. I believe you asked a question with regard to minorities. I wanted to address that issue by describing what we are doing in terms of our programming in that particular area. First, let me point out that over 50 percent of our grant programs are dedicated to reaching youth from multi-cultural families, and the principal investigators also represent that population.

In addition, within our training program, we have a special focus in that area to ensure that we are training professionals from multi-cultural communities in the area of prevention and treatment.

In our communications area, we have done a lot of work in developing the types of materials that are culturally relevant and age-appropriate. This year, we will be developing a media campaign that is directed toward urban youth.

DOLLARS BUDGETED FOR MINORITIES

Mr. STOKES. Dr. Goodwin, I want the record to accurately reflect in terms of your budget the amount of your programs specifically targeted towards minorities.

In terms of your total budget, I want to know the amount of your fiscal year 1991 request, and then the percentage of programs specifically targeted towards minorities.

Dr. GOODWIN. Our analysis indicates that the total that is very specifically targeted—and I agree that many of the other programs bear on minority issues in a more indirect way—but those specifically targeted total $86,000,000.

Mr. Stokes. What percentage of your total budget would that be?

Dr. Goodwin. About 3 percent of the total.

Mr. Stokes. Three?

Dr. Goodwin. Does that include the block grants? I don't think that is——

Ms. Johnson. That must not include——

Mr. Stokes. If you will do this, Doctor——

Dr. Goodwin. That does not include the block grants.

Mr. Stokes. In the record, if you will take the time to make it clear and specific.

[The information follows:]

Excluding the ADMS Block grants, ADAMHA's minority funds for FY 1991 are provided within an overall framework of targeted research and demonstration programs and related research and demonstration programs. Targeted research, services and demonstration programs total $20.3 million which focus on minority populations, an increase of 10 percent compared to FY 1990. Related research and demonstration programs are those programs relevant to minority populations and focus on all subcultures which by definition include minorities. The total of these two components ($1.1 billion) represents 37 percent of ADAMHA's total budget.

Related programs for the Office for Substance Abuse Prevention (OSAP), the Office for Treatment Improvement (OTI), and the ADMS block grants focus on high-risk, minority components of the general public. The funding of these programs are targeted for minority populations since minority populations are significantly represented within the target groups for programs like OTI's grants to Crisis Areas and OSAP's grants for Pregnant Women and their Infants program.

This approach represents a reasonably sound estimation of targeted and related funds which benefit minorities. Continued data collection will provide additional statistics to refine and more specifically identify research, prevention, service, and treatment programs for minority populations.

MINORITY STAFFING

Mr. Stokes. Dr. Leshner, last year, Dr. Judd told me in response to a question that there were no minorities working in the homeless and AIDS programs. He said at that time that these offices might be bringing in minorities in the near future.

My question is, are there minorities now working in these programs?

Mr. Leshner. Minorities are working in these program areas but there are no minorities directly working in these offices. For example, Dr. Ramos, the Deputy Director for Prevention, has responsibility for the AIDS prevention program with Hispanics, but he is not literally in the Office of AIDS Programs.

Mr. Stokes. You do have staffs in those offices?

Mr. Leshner. Yes, sir.

Mr. Stokes. How many people?

Mr. Leshner. The homeless office has four permanent staff, and the AIDS program, I believe, has seven staff.

Mr. Stokes. You mean with all the homeless people and all the minorities with AIDS, that you can't find any minorities to put on the staff?

Mr. Leshner. We do have a large number of minority staff members who are parts of the consortia that work with these offices. These offices serve as coordinating bodies within the Institute.

Mr. Stokes. Would you, for the record, clarify and specify for me where these minorities are?

Mr. Leshner. I will be happy to do that, sir.

[The information follows:]

OFFICE OF PROGRAMS FOR THE HOMELESS MENTALLY ILL

The Office of Programs for the Homeless Mentally Ill, National Institute of Mental Health does not currently employ any minority individuals. At present, the Office has only 2 permanent, full-time employees; a GS-15 Office Director and a GS-9 social science analyst. The Office uses a number of ad hoc advisory groups and consultants to supplement its staff and to provide expertise on a range of issues pertaining to the homeless mentally ill population.

On a regular basis, the Office coordinates and consults with other NIMH staff who are knowledgeable on the special needs of minority persons who are homeless and mentally ill. Specifically, the Office works closely with Delores Parron, Ph.D., Associate Director for Special Populations and H. Alice Lowery, Chief, Psychosocial Treatments and Rehabilitation Program, Schizophrenia Research Branch.

Four minorities assist the Office, in an advisory capacity, with the implementation of the National Evaluation of the McKinney demonstration Projects for Homeless Adults with Mental illness. They are: Joyce Rayzor, White House Fellow, Department of Housing and Urban Development; James Jones, Ph.D., American Psychological Association; Norweeta Milburn, Ph.D., Howard University; and Delores Parron, Ph.D., Associate Director for Special Populations, NIMH.

The Office utilizes, as consultants, two senior minority professionals who are prominent in the areas of research and mental health services pertaining to homelessness and mental illness among minority persons; Norweeta Milburn, Ph.D. of Howard University and Marsha Martin, D.S.W. of Hunter College, School of Social Work. Additionally, the Office insures that all review committees responsible for the review and approval of homeless grant applications have representation that includes minority reviews sensitive to the needs of homeless mentally ill minority persons.

Recognizing the lack of minority persons involved in research on homelessness and its relationship to mental illness, the Office of Programs for the Homeless Mentally Ill will co-sponsor a Minority Research Development Meeting on Homelessness and Mental Illness with the Minority Research Resource Branch of the Division of Biometry and Applied Science. The purpose of this meeting is to encourage and assist minority investigator-initiated research on the homeless mentally ill population. In addition, this meeting will focus on research on minority homeless mentally ill persons. The meeting is scheduled for the summer of 1990.

OFFICE OF AIDS PROGRAMS

The NIMH Office of AIDS Programs currently employes one Black individual among the eight staff members. The Office of AIDS Programs is a coordinating office that works extensively with multiple units within NIMH and draws heavily on expertise throughout the Institute. For example, the Deputy Director for Prevention and Special Projects, an Hispanic, has developed several program initiatives related to HIV infection in minority populations. In addition, the Deputy Associate Director for Special Populations, a Black, serves on the NIMH AIDS Task Force, and participates in the NIMH AIDS Working Group on Minorities. Also, AIDS office staff are working closely with the Associate Director for Special Populations, a Black female, on a special initiative to increase participation of minority group members as principal investigators on AIDS research grants. Special reviews for AIDS grant applications are coordinated and conducted by a Black female Health Scientist Administrator.

The NIMH AIDS program is engaged in a series of efforts to increase the number of successful applications submitted by minority investigators. A research seminar/workshop is being developed to provide technical assistance to minority investigators to develop research applications related to HIV infection and AIDS. Approximately 50 promising minority investigators in the early phase of their careers have expressed initial interest in this program, which will consist of a 3½ day seminar and follow-up consultation. The goal is to add 5 to 7 new awards with minority principal investigators in FY 1991.

TREATMENT CHALLENGES

Mr. STOKES. Dr. Primm, you bring to this office a well-deserved, well-earned national reputation in your field. Tell us what you believe are the major challenges facing your office and how you plan to address these challenges.

Dr. **Primm**. I think the first would be siting of drug treatment programs, that is, the issue of their establishment in cities, and wherever else they are needed. There is such a great opposition out there to the location of these programs. We need to change the attitude of the public about establishing more drug treatment programs. We can certainly have more money, but if we don't have the personnel, nor the bricks and mortar, nor the acceptance of drug treatment programs in the community, these will be the major problems to increasing treatment capacity, and to people doing well in treatment.

Another thing that I think is just as important is that people don't know that treatment works. We need to market the fact that treatment does work. We need to market the fact that this is a chronic, relapsing disease requiring a long-term commitment to the care of individuals who are afflicted with the problem of addictive behavior.

Certainly when there are co-existing diagnoses like alcoholism, drug abuse and mental health disorders, we need to focus on those issues and mainstream this care into the traditional public health care system. We need to offer prophylactic care for HIV-infected individuals who are drug abusers, not just intravenous drug abusers, but drug abusers who exchange sexual favors for drugs and become infected with all kinds of sexually-transmitted diseases, but particularly the HIV.

I would like to expand that care to include their significant others and possible family members who may be infected with the HIV virus. So, I think if I had all the money in the world and all the support, I would do all of those things, and we would have a great impact on the problem of substance abuse in this Nation.

GENETICS OF ADDICTION

Mr. **Stokes**. Dr. Goodwin or Dr. Schuster, do we know if there is a genetic vulnerability towards addiction?

Dr. **Goodwin**. We know that there is a strong genetic vulnerability. We know that most from the alcoholism field, where the data is most extensive, but we also have a smaller data set in the drug abuse area; for example, if you are a young drug abuser, your chances of having an alcoholic family history are about three times greater than if you are not a drug abuser.

Perhaps Dr. Schuster could answer the question more fully.

Dr. **Schuster**. We have recently begun a large-scale study of a twin registry for veterans that will give us an answer to the issue that you are proposing. We believe, because we can identify children as early as 3 or 4 years of age who have a greater risk for drug abuse, that there is probably a genetic component to this; at least for certain forms of drug abuse.

Therefore, this genetic study that we are conducting at Harvard University is of great importance to us. We hope to have the results of that within the next two years.

Mr. Stokes. What research are you supporting related to the effect of crack cocaine on babies? What do we know so far about that?

Dr. Schuster. First of all, we need to get an accurate picture of what the impact of crack cocaine is in terms of numbers. This year we will conduct—the first nationally representative sample of hospital-delivered infants to determine how many of them are exposed not only to crack cocaine, but to all illicit drugs, as well as alcohol and cigarettes.

We know on the basis of our studies now that crack cocaine affects the infant and the mother's health during pregnancy and can give rise to hemorrhaging at the time of birth. Children are born prematurely, with smaller head size. There are a number of indications that there are adverse effects of this.

Perhaps more importantly, there are developmental difficulties that occur after the infant is born that prevents the kind of bonding that is essential between a mother and her child. This is particularly important in the area of crack cocaine, because often the mothers have a tenuous and ambivalent relationship to them.

Having a child that is irritable and very difficult to comfort makes the bonding process much more difficult. We know there are cognitive deficits that occurr later. What we are doing is, first, attempting to educate physicians in primary care and family practice, and obstetrics and gynecology, to recognize the signs of drug use at an earlier stage.

Secondly, we are trying to develop new treatment modalities specifically for pregnant women that will be more appealing to them and that will also have special features. We are working on medications that would not cross the placenta, so that we could treat the mother without exposing the infant to the medication. That is possible.

So there are a number of things that we are doing to try and intervene in this very tragic situation.

Mr. Stokes. Thank you.

Mr. Natcher. Mr. Early, I yield to you.

Mr. Early. Pursuing that last question, as far as cocaine addiction among women of child-bearing age becoming an increasingly serious problem: Dr. Schuster's response to Mr. Stokes was more what the problem was, what happens. For the record, expand on what we are doing to address the problem, on what we are doing to treat the crack babies.

[The information follows:]

Since obstetrical and neonatal effects such as spontaneous abortions, premature delivery, low birth weight infants, infants small for their gestational age, neurodevelopmental defects (impaired memory, intelligence, and motor coordination problems) have all been associated with in utero cocaine exposure, clinical assessment and judgment play a major role in providing initial treatment and judgement play a major role in providing initial treatment to affected infants. Caution is urged when treating these infants as they are usually hyperirritable; provision of a "safe and nurturing" environment seems singularly important. At this time there are no pharmacological treatments available although work in this age is planned.

NIDA is currently participating in a coordinated effort with the Association for Medical Education and Research in Substance Abuse (AMERSA), and Brown University Center for Alcohol and Addiction Studies, to train physicians, including practitioners in obstetrics and pediatric medicine, to diagnose, intervene, and treat the multiple problems related to drug dependency.

In addition, in collaboration in NIAAA and OSAP, a drug abuse treatment curriculum is being developed by the American College of Obstetricians for schools of nursing. Perinatal addicition is part of the curriculm. NIDA also participates in the clinical faculty development grant program.

Mr. EARLY. Dr. Schuster spoke about effective forms of treatment that are presently available, and he mentioned a couple of drugs which I can't pronounce. Would those drugs be suitable for a pregnant woman?

Dr. SCHUSTER. The answer is yes.

TREATING PREGNANT ADDICTS

Mr. EARLY. Doctor, from what I know about you. I think you are a tremendous addition to ADAMHA, and I know you are a street guy that can get to, talk to, addicts and the people affected. The drugs that Dr. Schuster speaks about, are they abailable to pregnant women?

Dr. PRIMM. Not at this time, Congressman.

Mr. EARLY. Do you think they should be available to them?

Dr. PRIMM. First, I think that until the proper studies are done on those drugs and we have enough information, they shouldn't. The drugs have not yet been released for wide-spread care of women who are pregnant and who may be using cocaine, at least not to my knowledge.

But when that happens, my office will expeditiously try to transfer that knowledge to the clinical setting so that those substances will be able to be used quickly.

Mr. EARLY. I want to see some practical application rather than all rhetoric and all theory. AIDS: The gay community has said they are dying of AIDS, speed up the process, get the drugs to the AIDS patient. These cocaine addicted mothers have got problems. Are we going to take the same road to get there more quickly?

Dr. PRIMM. I would think you would have to be a great deal more cautious. You are talking about the possibility of teratogenic effects of these substances. I think we need extensive testing before we use any chemical therapy in women who are pregnant. That, I think, would be the opinion of my colleagues.

Dr. GOODWIN. We have been working with the FDA to look at the fast-track mechanism. That has been used successfully in the AIDS area. There are risks, and one wants to be careful. On the other hand, the risk to a baby of having a mother on cocaine is considerable, as well.

Mr. EARLY. Is there coordination between your treatment programs and HRSA's maternal and child health programs?

Dr. GOODWIN. Yes, there is. There are two things we are doing with HRSA. One is the coordination between Maternal and Child Health and Dr. Primm's operation in OTI. We have transferred $12,000,000 to make sure drug abuse treatment was being funded there.

Mr. EARLY. Where did you get that?

Dr. GOODWIN. NIDA.

Mr. EARLY. Yesterday there was a discussion with Dr. Alexander of the Child Health Institute about the problem of maternal drug abuse, particularly crack/cocaine and crack babies. Because of the serious consequences of cocaine abuse he indicated that there was a need to revisit the issue of research in the area of withdrawing pregnant women from cocaine prior to birth.

Would you agree with that? Is NIDA conducting research in this area?

Dr. **Schuster**. First of all, there is no question but that we would like to get the pregnant female off crack/cocaine as soon as possible.

We should remove them. There is no reason that they should not be abruptly terminated from cocaine.

Mr. **Early**. What do you do? He said that issue of withdrawing pregnant women from cocaine prior to birth should be revisited.

Dr. **Schuster**. All our studies in animals and humans have indicated cocaine does not produce physical dependency. Therefore it can be terminated abruptly.

It would be indicated that the mother should be terminated from cocaine use as quickly as possible.

Mr. **Early**. I think we know that.

Dr. **Schuster**. That is different than with heroin where the fetus would be undergoing physical withdrawal. That has its own set of problems that have to be treated in a special way. With cocaine our animal studies have indicated there is no physical dependency in the usual sense so we can abruptly withdraw her.

Mr. **Early**. We want to get the mother off cocaine too.

Dr. **Schuster**. Absolutely but it has to be done in a more gradual fashion in order not to cause birth defects in the fetus.

Abrupt withdrawal from heroin can cause damage to the fetus, so withdrawal has to be tapered over a week or so.

Mr. **Early**. To what extent is there collaboration between NIDA and NICHD on research in maternal drug abuse and infants?

Dr. **Schuster**. We are co-sponsoring two technical reviews, one in June and one in July on this topic to bring together all the information that we have. As a product of that, we will have a joint RFA, a request for grant proposals, to emphasize the areas of need that we identify from these particular reviews.

BALANCE BETWEEN MENTAL AND ADDICTIVE RESEARCH

Mr. **Early**. Dr. Leshner, from a layman, there is a war on drugs, and we all want to do it. I just have reservations that it maybe at the expense of research on alcohol and mental health. I don't want you to get in any trouble.

Mr. **Leshner**. I have no specific comment, sir.

Mr. **Early**. That speaks for itself.

Dr. **Goodwin**. I should speak to that as the Administrator. We do have mechanisms for trying to not run that risk. For example, when money came to the agency for co-morbidity, the study of coexistence of drug and alcohol disorders, we asked NIMH to take responsibility.

Also the medication development program NIDA is running with their money is going to benefit the other two institutes because many of the findings may have applications beyond just drug abuse alone.

Mr. EARLY. As the Chairman and everyone on this committee knows, I have great respect for ADAMHA. I think ADAMHA has made a lot of progress. I have great respect for you. I think you are defending OMB too much.

There are a lot of things we are not going to do in mental health. My state is going to cut back drastically on what they do. The people should expect someone to pick it up. We are not going to pick it up here. You are doing too good a job defending what is not in this budget for alcohol and mental health research.

Thank you, Mr. Chairman.

REPROGRAMMING

Mr. NATCHER. Doctor, $40 million was provided for treatment waiting period reduction grants in 1990, subject to an authorization being enacted. As you know, the committee believes that using these funds for any other purpose would require a change in legislation.

If an authorization is not enacted, do you plan to propose legislation to change the use of the funds?

Dr. GOODWIN. There is a reprogramming request that is currently being discussed within the department. We do feel that from our perspective in the agency, there are very important programs that are already authorized, and that we could use this money for other authorized programs. We are in the process of working out a reprogramming request for that.

Mr. NATCHER. Thank you, Doctor. We want to thank you ladies and gentlemen for appearing before our committee at this time in behalf of your budget request for the fiscal year 1991. It has been a good hearing and we appreciate it.

Thank you very much.

Dr. GOODWIN. Thank you for your attention.

Mr. NATCHER. The committee will now adjourn until 10 o'clock in the morning.

[The following questions were submitted to be answered for the record:]

DROPOUT AND RELAPSE RATES IN DRUG TREATMENT PROGRAMS

Mr. Natcher: What are the average dropout and relapse rates in drug treatment programs?

Dr. Schuster: Both relapse and dropout rates vary with the severity of the individual's drug problem and the severity of other problems (including psychiatric or medical disorders, impaired social functioning, unemployment, and family or legal difficulties) which the drug dependent individual may have, the level of motivation to stop using drugs, the type of treatment, and external influences such as the threatened loss of a job, peer and family influences, or threat of incarceration.

Those likely to relapse to the most serious patterns of drug use (e.g., daily opiate or cocaine use) tend to do so quite soon after leaving treatment. In publicly-funded treatment, research shows that the first 3 months after treatment are the most critical time. A study of heroin addicts followed over a 12-year period found that 27 percent of the sample relapsed to daily opiate use within the first 3 months following treatment and that another 17 percent relapsed between 3 months and 3 years following treatment. This suggests the importance of aftercare and relapse prevention as an integral part of effective treatment.

In one study (the Drug Abuse Research Project - DARP) of publicly-funded drug treatment programs reported in 1980, an average of 15 percent of clients completed treatment. By program, this ranged from 12 percent in methadone programs, 13 percent in drug-free outpatient programs, 16 percent in detoxification programs, and 23 percent in residential therapeutic community programs. Completion rates are somewhat misleading, however, since some programs have indefinite duration. For example, in methadone programs, 83 percent of the clients were still in treatment after 90 days, compared with 57 percent of clients in therapeutic communities and 45 percent of clients in drug-free outpatient programs. Detoxification is a short-term regimen, and is usually a precursor to other treatments. Only 10 percent stayed beyond 9-90 days in detoxification programs.

An average of 12 percent of clients were referred to other programs. Most of these, 22 percent, were referred from methadone programs. Seven percent were referred from therapeutic communities, 5 percent from drug-free outpatient programs, and 3 percent from detoxification programs.

The remaining 73 percent were either expelled from or quit treatment. In methadone programs, 66 percent left treatment prematurely. The figure for therapeutic communities was 71 percent, 82 percent in drug-free outpatient programs and 81 percent in detoxification programs. In a more recent study (the Treatment Outcome Prospective Study - TOPS), it was reported that by the end of the third month after entering treatment, 56 percent had either dropped out, transferred, or completed treatment.

At this time, no data are available on relapse or dropout rates in private, for-profit treatment programs. However, research (DATOS, the Drug Abuse Treatment Outcome Study) is currently underway that will investigate retention, relapse, and other issues related to the current state of treatment effectiveness in private as well as publicly-funded treatment facilities.

Both of these earlier studies (DARP and TOPA) were based on clients entering treatment before 1981. Because of the changes in drug abuse problems and types of treatments provided that have occurred since that time, it is expected that DATOS will provide important information on the effectiveness of current programs and the dropout and relapse rates of clients.

STAFFING FOR ANTI-DRUG ACTIVITIES

Mr. Natcher: Your staffing levels would increase by almost 18 percent between 1989 and 1991, mostly for anti-drug activities. Is this the end of your staffing buildup in response to the drug epidemic?

Dr. Goodwin: We anticipate further minimum FTE expansion for the two new offices OSAP and OTI. Ultimately the number of FTEs for the drug initiative will depend on the level of funding approved by the Congress, and the number and type of new programs we are required to initiate. The "drug war" cannot be waged successfully without an adequate number of professional and support staff.

ANIMAL FACILITY CERTIFICATION STANDARDS FOR IN-HOUSE LABS

Mr. Natcher: Do your in-house labs meet animal facility certification standards?

Dr. Goodwin: ADAMHA's intramural program is firmly committed to a sound animal program which is in compliance with current PHS and NIH policies and the Animal Welfare Act.

Major renovations have been completed, but a few minor improvements will be made to assure that our facilities at NIH meet accreditation standards used by the American Association for Accreditation of Laboratory Animal Care (AAALAC). NIAAA and NIMH facilities will be included in NIH's application for accreditation which will be submitted in December 1990. All these intramural facilities will be in compliance with AAALAC standards by that time.

NIDA's Addiction Research Center's animal facilities are fully accredited by the American Association for Accreditation of Laboratory Animal Care.

CLINICAL TRAINING GRANTS

Mr. Natcher: Does your request permit all continuing clinical training grants to be fully funded in 1991?

Dr. Judd: No, only the Faculty Scholars and the State Human Resource Development will be fully funded.

DRUG ABUSE IN RURAL AREAS

Mr. Natcher: There does not seem to be much information regarding the prevalence of drug abuse in rural areas or special rural treatment needs. What steps are you taking to collect this information?

Dr. Schuster: Our national surveys such as the National Household Survey on Drug Abuse, the National High School Senior Survey, and DAWN, presently collect data from rural areas. Published reports from the Household and High School Surveys include drug use prevalence estimates for "nonmetropolitan areas", meaning all areas outside the approximately 300 metropolitan areas defined by OMB. In general, these data show that drug use is less prevalent in nonmetropolitan areas.

When the new probability sample for DAWN is fully implemented next year, it may be possible to estimate emergency room drug episodes in rural areas. More detailed analysis of Household Survey data for rural areas is also possible. In addition, research and block grant set-aside funds will be used to expand data collection on the nature, extent, and consequences of drug abuse among women of child-bearing age residing in rural areas.

While drug use may be less prevalent in rural areas, its prevention and treatment is no less important. NIDA's community prevention and treatment research programs plan to address special rural treatment needs, particularly in relation to the differences in community support systems, treatment availability, and other factors which differ from drug abuse in nonrural areas.

AFTERCARE IN TREATMENT RESEARCH AND DEMONSTRATION PROJECTS

Mr. Natcher: There seems to be an increasing focus on "aftercare". How much research are you supporting in this area?

Dr. Schuster: Aftercare has been built into numerous treatment research and demonstration projects, and is viewed as an important component for preserving the gains made in treatment, as well as for enhancing treatment effectiveness and efficiency. Research on aftercare models and testing of their effectiveness has been carried out for both opiate and cocaine addicts, with encouraging results. Many of NIDA's treatment research demonstration grants include aftercare as part of the overall strategy. For example, one project combines a shorter period of therapeutic community treatment (6 months rather than the usual 1 year) with aftercare and relapse prevention training.

Among the treatment research grant projects, several studies focus on post-treatment or "aftercare" programs designed specifically for adolescents. One such project evaluates a social skills training program in terms of its impact on adolescents returning to the community after exposure to a drug program while in a juvenile correctional facility. Another such study determines the differential effectiveness in terms of preventing relapse, of two aftercare strategies, namely, a support group/talk therapy model based on AA self-help group principles and a skills-building training program.

REPROGRAMMING IN NIDA

Mr. Natcher: Your budget reflects a proposed $2.2 million reprogramming in 1990. When will the Committee receive this request?

Dr. Goodwin: ADAMHA has forwarded NIDA's reprogramming through the normal Department and administrative channels. Barring any unforeseen problems, the Committee should receive the reprogramming shortly.

ALCOHOL TREATMENT PROGRAMS

Mr. Natcher: What are the dropout and relapse rates in programs that specialize in treatment of alcohol abuse as opposed to drug abuse?

Dr. Gordis: In alcohol treatment programs, dropout and relapse rates vary because the severity of the illness, social supports and other factors are different. Dropout rates for inpatient alcohol programs average about 10 percent during the inpatient phase. Reported relapse rates vary depending on the duration and completion of followup, reliance on self-report only, use of multiple sources of data, and the definition for relapse as well as severity of illness and social support. One inpatient facility recently reported a 60 percent abstinence rate at six months (Wallace et al, 1988). One year relapse rates for alcohol dependent individuals range from 30 percent to 75 percent.

A report based on 84 studies compared relapse rates during a twelve month period for alcohol, heroin, and cigarette smoking (Hunt et al., 1971). The relapse rate was high but similar for the first three months. For the next nine months the relapse rate was somewhat less for alcohol than heroin and smoking. At twelve months the relapse rates were about 65 percent for alcohol and 75 percent for heroin and smoking. It should be noted that these figures are based on a definition of relapse as being as few as one occurrence. A more recent report of 41 drug detoxification programs (Hubbard and Marsden, 1986) found a difference for particular drugs between any use at all during the year and daily use. For example, 44 percent of clients reported use of cocaine after treatment whereas only 20 percent reported daily use.

SUBSTANCE ABUSE COUNSELORS

Mr. Natcher: How many new substance abuse counselors will enter the field in 1990 and 1991 as a result of your training?

Dr. Johnson: During FY 1990 and FY 1991, OSAP expects to support the training of 5,000 new counselors while another 4,500 existing counselors will benefit from brief skills-enhancement seminars. OSAP will also sponsor training for over 6,000 physicians, nurses, social workers, and other primary care providers.

Mr. Natcher: Given the low salaries and sometimes unpleasant working conditions at drug clinics, do you expect any problems in recruiting these trainees?

Dr. Johnson: OSAP anticipates little difficulty attracting counseling trainees to training programs. Accumulation of training credits is necessary for becoming certified under every credentialing body in the country, and certification is a critical component in the award of promotions and raises. In addition, many counselors who are dually credentialed--that is, hold advanced degrees, licenses and certifications in other fields such as social work, psychology, nursing--may see ADA training as an added specialty.

BLOCK GRANT FORMULA

Mr. Natcher: You are asking the Committee to override authorizing law and allocate funding for the substance abuse block grant according to last year's formula. How much funding would be designated for drug abuse treatment under your proposal compared to current law?

Dr. Goodwin: The inter-state allotment of funding between mental health, and substance abuse programs is based, in large part on the level of Federal funding for categorical grants in FY 1980 and FY 1981. The current legislation requires a minimum of 35 percent for drug abuse and 35 percent for alcoholism and alcohol abuse the amounts the States use for substance abuse and allows 30 percent of the substance abuse funding can be used for either drug or alcohol programs. NASADAD has made projections that the split between drug abuse and alcohol program is approximately equal at 50 percent-50 percent; that projection is the basis for our projection of the amounts within the ADMS block grant used in drug abuse programs from year to year.

Using that methodology, ADAMHA projects that in FY 1990, alcohol and drug abuse programs each received approximately $447.8 million versus $237.6 million that went toward mental health initiatives. Under the current legislation, in FY 1991, mental health's share would increase to $379.9 million and alcohol and drug abuse programs would each be funded at approximately $419.4 million. Because the $85 million increase in the amount distributed to the states under the ADMS block grant was proposed specifically for drug abuse programs, ADAMHA is asking for a change to the authorization that would assure that each state receives at least as much as they received in FY 1990 for alcohol and mental health programs, and that the entire amount of the increase be allocated toward drug abuse programs. The resulting split in the block would be : Mental health-$237.6 million, Alcohol-$447.8 million, and Drug Abuse-$533.2 million.

Mr. Natcher: The additional $415 million provided for the block grant in 1990 was made available for State drawdown until April, 1992. How much of this funding do you expect to remain unspent by States at the beginning of fiscal year 1991?

Dr. Goodwin: Approximately 50 percent of the FY 1990 funds have been awarded, however no drawdown figures are yet available. We project that approximately 50 percent of the FY 1990 funds will be drawndown by the end of the fiscal year.

The Office for Treatment Improvement (OTI) has been working with the States to improve their application, obligation, expenditure, and drawdown of ADMS Block Grant funds. States are taking steps to expedite the use of the funds.

As of March 5, 1990, 87 percent of the FY 1989 ADMS Block Grant funds had been drawndown. Last year, by April 15 both the FY 1988 ADTR block grant and the ADMS block grants had drawndown 80 percent.

WAITING LIST GRANTS

Mr. Natcher: What is the level of unmet demand in the waiting list grants program?

Dr. Goodwin: With the $100 million appropriated for this program in FY 1989 and FY 1990, ADAMHA was able to fund 346 programs that will provide approximately 18,000 treatment slots if full expansion efforts are reached. These 18,000 slots will serve the needs of approximately 45,000 addicts.

One way to measure unmet demand in the waiting list program is to calculate the number of slots the Office for Treatment Improvement did not fund. There were approximately 1,306 slots within programs which applied that were not funded from the applications received. If the turnover rate of 2.5 persons per slot is applied, the level of unmet demand would be approximately 3,265 persons.

However, we believe that the substantial increase in the FY 1990 ADMS block grant program should provide adequate funding at the state levels to eliminate most waiting lists.

CRISIS AREA GRANTS VS. TREATMENT IMPROVEMENT GRANTS

Mr. Natcher: What are the differences between crisis area grants and treatment improvement grants?

Dr. Goodwin: Both programs are focussed on improving the quality of treatment programs. Crisis grants are targeted toward improving treatment systems in metropolitan areas that can demonstrate a high degree of drug abuse within their jurisdictions. Treatment improvement grants are geared toward individual programs, with emphasis on improving treatment outcome for patients in those programs.

Crisis grants, also known as the Target Cities Program, are large grants (averaging $4 to $5 million annually for three years) for metropolitan areas that have a demonstrably high incidence of drug abuse within their jurisdictions. Under this program, the emphasis is on improving city-wide treatment systems. As a consequence, the funding priorities for this program consist of: 1) the development central intake and referral systems; 2) the development of patient tracking systems; and 3) improved coordination among health, human services, and criminal justice agencies.

Conversely, Treatment Improvement grants will be provided to individual programs for the sole purpose of improving treatment quality and treatment outcome at the provider level. Grant awards under this program will be in the range of $350,000 to $500,000 annually for three years. Funding priorities include, among others: 1) hiring professional staff, 2) provision of primary medical care and mental health care services, 3) reducing the patient-to-counselor ratio, 4) staff training, 5) improved patient tracking systems, and 6) provision of vocational/educational and life skills counseling.

Both of these programs will be administered through the States.

TREATMENT IN CAMPUS SETTINGS

Mr. Natcher: Tell us more about treatment in "campus settings". How much would a campus project cost?

Dr. Goodwin: The cost of a campus project would depend on its size and configuration. In principle it should cost no more than the operation of an equivalent number of beds with equivalent services that are not located on a campus. Assuming that about 30 percent of the beds are for adolescents--treatment for this group is almost twice as costly as treatment for adults--we estimate that Federal costs of treatment would be 80 percent of a total cost of about $13 million for a campus of about 500 beds. The Office for Treatment Improvement estimates that each campus project will cost the Federal government approximately $10.5 million.

Mr. Natcher: Does your 1991 budget include funds for this purpose?

Dr. Goodwin: There are sufficient funds in the FY 1991 budget to establish a pilot campus projects. These will be three year demonstrations.

Mr. Natcher: Would Washington D.C. be a likely location for one of these projects?

Dr. Goodwin: Washington, D.C. is eligible to apply for a campus project. Awards will be made on a competitive basis and will be based on the quality of the application, relative need for services, and ability of the applicant State to provide a suitable physical plant for the 300-500 beds as well as the 20 percent cost of operations. OTI cannot predict who might get an award before any applications are received.

SAINT ELIZABETHS HOSPITAL

Mr. Natcher: How many patients now reside at St. Elizabeths compared to the total at the start of the transition period?

Dr. Judd: There was just under 1400 inpatients (average daily census) at St. Elizabeths on October 1, 1987 when patient care, administrative and fiscal responsibility was transferred to the District of Columbia pursuant to P.L. 98-621. Today, the number of inpatients in the District's Commission on Mental Health Services is virtually unchanged since there has not been successful opening up of residential beds in the community. Alternatively, the District's Mental Health Commission has organized on site about:

- 220 residential beds
- 60 ICF/MR beds
- 60 dually diagnosed beds

The District would be close to its 1990 target of 1,000 inpatients if those patients had been placed in the community and the 80 targeted acute psychiatric beds had been picked up by the city's private hospitals.

Mr. Natcher: What are the projected Federal costs of workmen's compensation for St. Elizabeths for the next five years?

Dr. Judd: The cost for payment of Worker's Compensation is projected to remain at about $1.8 million for each of the next five years. As you know, these funds are for reimbursement to the Department of Labor (DOL) Federally Employees Compensation Funds which makes benefit payments to former St. Elizabeths employees or their survivors who have adjudicated claims for injuries which occurred on or before the transfer date of September 30, 1987. Effort are, however, being made to reduce this annual cost. A case review is underway to identify any former St. Elizabeths employees who may have recovered sufficiently for a return to duty determination. In addition, we will endeavor to obtain OPM reimbursement for the amount those eligible individuals would receive had they elected Civil Service disability retirement in lieu of Worker's Compensation.

BUILDINGS AND FACILITIES

Mr. Natcher: What are your five-year projections for the Buildings and Facilities line item?

Dr. Goodwin: Buildings and facilities funding within ADAMHA are used for construction, repair, and improvement of our intramural research facilities at the National Institutes of Health campus, St. Elizabeths Hospital, the Flow Laboratory Building, Poolesville Animal Facility and the Addiction Research Facility at the Francis Scott Key

Hospital in Baltimore, MD. Our projects focus on renovations required to meet AAALAC accreditation, code and safety standards and are critical to the continued operation of these intramural programs.

The five year projections follow.

FY 1991	$ 3,126,000
FY 1992	$ 4,760,000
FY 1993	$ 4,760,000
FY 1994	$ 4,760,000
FY 1995	$ 4,760,000

Beginning in FY 1991 we have included approximately $1.6 million into each the resource requirements each year, to allow extensive renovation that will sustain HIV/AIDS basic and applied projects. Existing facilities do no meet biological safety standards for handling HIV infected sample and viral concentrates.

Outyear requirements beyond FY 1992 include minor repair and improvement costs associated with occupancy and use of Building 49 on the NIH campus, as well as the previously mentioned AIDS upgrades.

1989 NIDA REORGANIZATION

Mr. Natcher: Explain the 1989 NIDA reorganization that resulted in the shifting of $1.5 million within the Institute.

Dr. Schuster: In FY 1988 the Office of Financing and Coverage Policy (OFCP), an Office within the Office of the Administrator, ADAMHA was transferred to NIDA in order to expand the Institute's research program on drug abuse treatment services research. Because of the nature of the research being conducted by the OFCP while it was in ADAMHA, it seemed most appropriate to include it organizationally within the Institute's intramural research program. As a result, the personnel and funds for them were initially included in the Institute's intramural budget. Following this move, as the emphasis on the office's research began to focus specifically on drug abuse issues, and in an effort to better coordinate the Institute's expanded applied research programs, the Institute established a Division of Applied Research within the extramural research program and the OFCP, now called the Financing and Services Research Branch, was included in it. This branch currently conducts drug abuse health services research using funds from the extramural program and from the Congressionally mandated set-aside from the ADMS block grant.

RESEARCH ON TREATMENT OF SEX OFFENDERS

Mr. Natcher: How much research are you conducting on the treatment of sex offenders?

Dr. Judd: For two decades NIMH has had an active program of research on the assessment and treatment of sex offenders. In addition, the Institute initiated meetings to improve communication among the often isolated professionals working in this area; the Association for the Behavioral Treatment of Sexual Abusers has assumed responsibility for these increasingly well-attended and self-supporting meetings.

Of the Institute's past research, the decade-long work of Gene Abel, M.D., is of special note. Dr. Abel demonstrated, first in Memphis and then in New York City, that sex offenders who were living in the community and who were not legally required to participate would volunteer for extensive assessment and treatment. With benefit of new assessment procedures and absolute confidentiality, Dr. Abel found that the average offender had a duration and frequency of offending not previously known. Dr. Abel's "average" sex offender had committed scores of offenses a year over a 12-year period, and a majority had never been arrested. The willingness of these offenders to volunteer for extensive assessment and treatment points up the potential for confidential treatment as one important means to prevent sexual victimization. This research also found that a majority of sex offenders had begun their careers in adolescence, typically with less serious types of offenses, e.g., obscene phone calls and exhibitionism, pointing up the potential for treatment of juvenile sex offenders to prevent long careers of more serious sexual aggression. Because Dr. Abel's work involved the comparative evaluation of various components of treatment (e.g., social skills training vs. reduction of deviant sexual arousal), his research does not allow conclusions to be drawn about the overall effectiveness of treating sex offenders. However, a recently funded state research capacity-building grant to California's Department of Mental Health will allow an assessment of the effectiveness of such treatment. This grant strengthens the evaluation of a state-of-the-art psychosocial treatment program which was mandated by the California legislature to have a valid experimental design (viz., random assignment of subjects).

The Institute's current portfolio on the assessment and treatment of sex offenders also includes an extension of Dr. Abel's work on the out-patient treatment of child molesters. Special attention is being given to helping these offenders learn how to prevent relapse. Another 10-year program of cumulative research has been testing and refining schemes for classifying child molesters and rapists in order to allow better assessments of etiology, prognosis, and treatment needs.

COST OF ADAMHA PEER REVIEW PROCESS

Mr. Natcher: What is the estimated cost of the ADAMHA peer review process in 1989 - 1991?

Dr. Goodwin: The cost of the ADAMHA extramural peer review process in FY 1989 was $4,883,184. The estimated cost of this process for FY 1990 is $5,442,013.

Although data are not available for FY 1991, we expect a substantial increase in costs due to a projected increase in funding, an increase in the number of applications received, and the addition of several new review committees for the Office for Substance Abuse Prevention and the Office for Treatment Improvement.

PAYBACK REQUIREMENTS OF CLINICAL TRAINEES

Mr. Natcher: Identify by discipline the proportion of clinical trainees who are subject to payback requirements?

Dr. Judd: Since 1981, a total of over 6,000 individuals in the four disciplines have received NIMH clinical training stipends with payback requirements. The proportions by discipline are as follows: Nursing 23.3 percent; Psychiatry 2.7 percent; Psychology 40.6 percent; Social Work 31.5 percent; and Other 1.9 percent. These totals equal 100 percent. In FY 1989 a new policy was adopted whereby all trainees, regardless of discipline, will be obliged to pay back. In prior years the psychiatry program did not include stipend support.

FUNDING FOR CLINICAL TRAINING

Mr. Natcher: Show the amount of funding allocated to each of the five core clinical training disciplines in 1990.

Dr. Judd: The Clinical Training funds are initially allocated equally among the core disciplines. However, the grants funded are based on scientific merit.

For FY 1989, NIMH clinical training grants were funded among the core disciplines as follows: Psychiatry, $1,889,000; Psychology $2,003,000; Social Work $1,893,000; Nursing $1,226,000; and Multidisciplinary $449,000.

PREGNANT DRUG ADDICTS

Mr. Natcher: How much is contained in your 1991 request for research and services related to pregnant drug addicts compared to 1989 and 1990?

Dr. Goodwin: ADAMHA's FY 1991 budget includes $110 million in research and services devoted to drug abusing pregnant women and their infants. This is a $62 million increase over FY 1989 and an $9 million increase over FY 1990.

ADAMHA's program includes activities in the National Institute on Drug Abuse (NIDA), the Office for Substance Abuse Prevention (OSAP) and the Office for Treatment Improvement (OTI). NIDA's programs for pregnant women include research on the effects of maternal drug abuse on infant development, and research demonstrations to develop new therapeutic approaches or correct deficiencies in existing clinical programs designed to treat drug abusing women of child-bearing age as well as pregnant, post partum women and their infants. OSAP supports programs which are community-based models of education, prevention, and/or treatment for substance abusing women and their infants. These demonstration grant programs are designed to promote the coordinated participation of multiple organizations in the delivery of comprehensive services for these women. OTI will support the treatment costs of women enrolled in NIDA's research demonstrations for this population.

It is important to note that in addition to these programs, the ADMS Block Grant carries a legislative requirement that states devote 10 percent of their grant funding to programs for women.

FUNDING FOR ANTI-DRUG MEDICATIONS DEVELOPMENT

Mr. Natcher: Provide a table showing your proposed 1991 funding for anti-drug medications development compared to 1989 and 1990.

Dr. Goodwin: The information follows:

FY 1989	FY 1990	FY 1991
$30,217,000	$36,000,000	$40,000,000

LISTING OF CLINICAL TRIALS

Mr. Natcher: Provide a list identifying any clinical trials funded in your 1991 request and the cost of each.

Dr. Goodwin: The information follows:

NIDA Clinical Trials

The medications development program has been planning to expand clinical trial capacity and to sponsor or co-sponsor individual clinical trials. The trial capacity will be funded initially by an interagency agreement with the Washington VA hospital. Funding for 1991 will be in the range of $3 million for the agreement. Depending on the rate of staff recruitment, we will have the capacity to conduct 6 to 10 clinical trials at this site in 1991. We are also investigating the possible engagement of other VA hospitals for the performance of clinical trials in substance abusers.

Individual trials:	1991 Amount
1) gepirone in cocaine abusers	$500,000
2) Wellbutrin in cocaine abusers	500,000
3) dopamine antagonist (A69024 from Abbott) in normal volunteers to test the effects of the drug on subjective responses to cocaine	600,000
4) depot formulation of naltrexone in detoxified opiate addicts	400,000
Total	$2,000,000

NIDA is also planning to submit a treatment IND for LAAM. Patients would be placed on LAAM indefinitely; the Institute would like to have 1000 patients on this drug. Due to the fact that the study would be conducted at methadone clinics, we estimate the cost of this program to be about $2,000,000.

At the Addiction Research Center (NIDA's intramural program) the following studies are planned.

1) once weekly vs. twice weekly counseling for cocaine abusers
2) residential study of carbamazepine vs. active placebo on cocaine self-administration and cocaine craving
3) outpatient study of buprenorphine vs. clonidine in acute opiate withdrawal
4) residential study of dopamine 1 receptor antagonists vs. placebo on subjective effects of cocaine, cocaine craving, cocaine self-administration in cocaine abusers (this study will use experimental compounds obtained from NIDA's medications development program)
5) outpatient study of desipramine vs. active placebo in cocaine abusers

NIAAA Clinical Trials

Continuation costs for the following NIAAA supported clinical trials are included in the 1991 Budget request:

	1991 Amount
Pharmacological Treatment of Alcoholic Subtypes	$145,000
Imipramine Treatment of Alcoholism with Depression	214,000
Patient Treatment Matching Cooperative Clinical Trial	4,500,000
Effectiveness of the Community Reinforcement Approach	45,000
Imipramine Treatment of Alcoholics with Panic Disorder	175,000
Treatment of Dual Diagnosis and Homelessness	399,000
Naltrexone Treatment of Alcohol Dependence	132,000
Preventing Relapses After Couples Alcoholism Treatment	311,000
Cue Exposure Treatment of Alcoholism	171,000
Coping Skills In Spouses of Alcoholics	324,000
Secondary Prevention of Alcohol Problems In Women	412,000
	$6,828,000

NIMH Clinical Trials

NIMH's intramural program's clinical trials are generally limited to testing for drug efficacy. From the 184 ongoing protocols the NIMH Clinical Director has identified 70 protocols as clinical trials. The FY 1991 NIMH intramural research program's projected Clinical Center costs are approximately $18 million. The Principal Investigator and title of each clinical trial project are listed below.

PRINCIPAL INVESTIGATOR	TITLE
ALEXANDER	DEMECLOCYCLINE AS A TREATMENT OF POLYDIPSIA AND HYPONATREMIA IN NEUROPSYCHIATRIC PATIENTS
BENKELFAT	SHORT-TERM EFFECTS OF DIETARY TRYPTOPHAN ALTERATIONS
BAGEL	A STUDY OF THE EFFECT OF ACUTE AND CHRONIC TREATMENT OF SCHIZOPHRENIA WITH ORAL AMPHETAMINE

PRINCIPAL INVESTIGATOR	TITLE
BAGEL	THE EFFECT OF SODIUM IMMOTILE ON MEMORY, THOUGHT PROCESSES AND REACTION TIME AND ON PRODUCTIVE AND DEFECT SYMPTOMS OF SCHIZOPHRENIA
BAGEL	PREVENTION OF MIGRAINE WITH PENTOSAN POLYSULFATE
BRIDGE	A PHASE I TRIAL OF PEPTIDE T: EFFICACY FOR THE NEUROPSYCHIATRIC COMPLICATIONS OF ACQUIRED IMMUNODEFICIENCY SYNDROME (AIDS)
BRIDGE	A PHASE I INTRANASAL TRIAL OF PEPTIDE T: ASSESSMENT OF THE SAFETY, TOXICITY, AND PHARMACOKINETICS OF PEPTIDE T IN PATIENTS WITH DEPRESSION, MEMORY/LEARNING DISORDER, AND NORMAL VOLUNTEERS
BRIDGE	A PHASE I TRIAL INTRANASAL PEPTIDE T: SAFETY, TOXICITY, AND PHARMACOKINETICS IN HUMAN IMMUNODEFICIENCY VIRUS-1 (HIV-1) INFECTED PATIENTS
BRIDGE	A PHASE I TRIAL OF INTRANASAL PEPTIDE T: SAFETY, TOXICITY, AND PHARMACOKINETICS IN THE TREATMENT OF PSORIASIS
DANIEL	CLINICAL TRIAL OF COMBINED MOLINDONE OR HALOPERIDOL AND L-DOPA IN SCHIZOPHRENIA
EGAN	A STUDY OF ALPHA TOCOPHEROL IN THE TREATMENT OF TARDIVE DYSKINESIA
GOLD	THE EFFECTS OF ARGININE VASOPRESSIN ADMINISTRATION ON NEUROENDOCRINE RESPONSE AND COGNITION IN PATIENTS WITH PRIMARY AFFECTIVE DISORDER
GOLD	BIOMEDICAL AND CLINICAL EFFECTS OF BLUOXETINE IN PATIENTS WITH AFFECTIVE DISORDERS, EATING DISORDERS, AND OBSESSIVE COMPULSIVE DISORDERS
GOLD	ASSESSMENT OF THE PLASMA CHOLECYSTOKININ RESPONSE TO TEST MEAL ADMINISTRATION AND THE EFFECTS OF CHOLECYSTOKININ ON FEEDING BEHAVIOR IN PATIENTS WITH EATING DISORDERS AND DEPRESSION
INSEL	OBSESSIVE-COMPULSIVE DISORDER: A DOUBLE-BLIND STUDY OF CLOMIPRAMINE
INSEL	A DOUBLE-BLIND STUDY OF FLUOXETINE IN OUTPATIENTS WITH DEPRESSION AND OBSESSIVE-COMPULSIVE DISORDERS
KLING	PLASMA NOREPINEPHRINE KINETICS IN MAJOR AFFECTIVE DISORDER
KONICKI	METHYLPHENIDATE IN MEDICALLY ILL DEPRESSED PATIENTS

PRINCIPAL INVESTIGATOR	TITLE
LEIBENLUFT	COMBINING SLEEP DEPRIVATION WITH ANTIDEPRESSANT MEDICATION IN THE TREATMENT OF BIPOLAR AND UNIPOLAR DEPRESSION
MURPHY	COGNITIVE AND ENDOCRINE EFFECTS AND PHARMACOKINETICS OF NICOTINE IN PATIENTS WITH DEMENTIA OR AFFECTIVE DISORDERS AND CONTROLS
MURPHY	OBSESSIVE-COMPULSIVE DISORDER: A DOUBLE-BLIND STUDY OF CLOMIPRAMINE AND BUSPIRONE
MURPHY	OBSESSIVE-COMPULSIVE DISORDER: A DOUBLE-BLIND TREATMENT STUDY OF TRAZODONE, M-CHLOROPHENYLPIPERAZINE, AND CLOMIPRAMINE
PICKAR	THE EVALUATION OF THE THERAPEUTIC AND BIOCHEMICAL EFFECTS OF VERAPAMIL IN SCHIZOPHRENIA
PICKAR	THERAPEUTIC TRIAL OF ALPRAZOLAM IN SCHIZOPHRENIA
PICKAR	THERAPEUTIC TRIAL OF NALMEFENE PLUS NEUROLEPTICS IN SCHIZOPHRENIA
PICKAR	TYPICAL AND ATYPICAL NEUROLEPTIC TREATMENT OF SCHIZOPHRENIA
PICKAR	SHORT-TERM EFFECT OF PERIPHERAL DA RECEPTOR BLOCKERS ON PLASMA HVA LEVELS
PICKAR	EVALUATION OF THE THERAPEUTIC AND BIOCHEMICAL EFFECTS OF MILACEMIDE IN SCHIZOPHRENIA
POST	ET-495, A DOPAMINE RECEPTOR STIMULANT IN THE TREATMENT OF AFFECTIVE DISORDERS
POST	EVALUATION OF CBZ IN THE TREATMENT OF MANIC DEPRESSIVE AND SCHIZOAFFECTIVE PSYCHOSIS
POST	EVALUATION OF SODIUM VALPROATE IN THE TREATMENT OF MANIC DEPRESSIVE AND SCHIZOAFFECTIVE PSYCHOSIS
POST	DIFFERENTIAL EFFECTS OF L-THYROXINE AND L-TRIIODOTHYRONINE IN THE POTENTIATION OF TREATMENTS FOR AFFECTIVE ILLNESS
POST	EVALUATION OF THE -10-11-EPOXIDE METABOLITE OF CARBAMAZEPINE (TEGRETOL) IN THE TREATMENT OF MANIC-DEPRESSIVE AND SCHIZOAFFECTIVE PSYCHOSIS
POST	L-BACLOFEN IN THE TREATMENT OF MANIC-DEPRESSIVE ILLNESS AND PANIC- ANXIETY DISORDER

PRINCIPAL INVESTIGATOR	TITLE
POST	CARBAMAZEPINE AND LITHIUM TREATMENT OF BIPOLAR ILLNESS
POTTER	EVALUATION OF ANTIDEPRESSANT AND ANTICYCLING EFFECTS OF CLORGYLINE PLUS LITHIUM IN TREATMENT-RESISTANT PATIENTS
POTTER	EFFECTS OF IDAZOXAN ON MOOD, NEUROTRANSMITTERS AND BLOOD PRESSURE IN PATIENTS WITH A PRIMARY AFFECTIVE DISORDER
POTTER	EFFECTS OF IDAZOXAN ON NEUROENDOCRINE RESPONSES, SIGNAL TRANSDUCTION, NEUROTRANSMITTERS, AND COGNITIVE FUNCTIONS
POTTER	HEPTYLPHYSOSTIGIMINE ADMINISTRATION TO HEALTHY NORMAL VOLUNTEERS
RAPOPORT	THE TREATMENT OF SEVERE OBSESSIONAL DISORDER OF CHILDHOOD WITH CHLORAMIPRAMINE
RAPOPORT	BIOCHEMICAL CORRELATES OF STIMULANT DRUG TREATMENT IN HYPERACTIVE CHILDREN
RAPOPORT	A DOUBLE-BLIND COMPARISON OF CLOMIPRAMINE AND DESMETHYLIMPRAMINE FOR ONCHYPHAGIA (NAIL-BITING) AND TRICHOTILLOMANIA (HAIRPULLING)
RAPOPORT	AN OPEN TRIAL OF FLUVOXAMINE FOR CLOMIPRAMINE-NONRESPONSIVE OBSESSIVE COMPULSIVE DISORDER
RUBINOW	THE TREATMENT OF MENSTRUAL-RELATED MOOD DISORDERS WITH PROGESTERONE SUPPOSITORIES, SYNTHETIC PROGESTINS AND CBZ
RUBINOW	THE TREATMENT OF MENSTRUAL-RELATED MOOD DISORDERS WITH VITAMIN B6
RUBINOW	THE TREATMENT OF MENSTRUAL RELATED MOOD DISORDERS
RUBINOW	THE STUDY OF THE EFFICACY OF ALPRAZOLAM IN MENSTRUAL-RELATED MOOD DISORDERS
RUBINOW	THE TREATMENT OF MENSTRUAL-RELATED MOOD DISORDER WITH THE ANTIPROGESIN RU 486
RUBINOW	THE STUDY OF THE EFFICACY OF L-THYROXINE IN MENSTRUAL-RELATED MOOD DISORDERS
RUDORFER	BIOLOGICAL EFFECTS OF ELECTROCONVULSIVE (ECT) IN MAJOR AFFECTIVE DISORDER

PRINCIPAL INVESTIGATOR	TITLE
RUDORFER	EFFECTS OF LITHIUM CARBONATE ON NEUROTRANSMITTERS, WHITE BLOOD CELL SURFACE RECEPTORS AND NEUROENDOCRINE RESPONSE TO A SEROTONERGIC CHALLENGE IN HEALTHY VOLUNTEERS
SILBERMAN	THERAPEUTIC TRIAL OF CLONIDINE IN DEPRESSION AND MANIA
SUNDERLAND	COMBINATION DRUG THERAPY IN DEMENTIA OF THE ALZHEIMER TYPE
SUNDERLAND	COMBINATION PHARMACOTHERAPY IN DEMENTIA OF THE ALZHEIMER TYPE
SUNDERLAND	THE EFFECT OF TRAZODONE AND BUSPIRONE ON BEHAVIORAL AND COGNITIVE SYMPTOMS IN ALZHEIMER'S DISEASE
SUNDERLAND	COGNITIVE AND BEHAVIORAL EFFECTS OF DEHYDROEPIANDROSTERONE (DHEA) IN NEUROPSYCHIATRIC POPULATIONS AND CONTROLS
SUNDERLAND	CHOLINERGIC EFFECTS ON INTERFERENCE, LONG TERM FORGETTING AND IMPLICIT MEMORY IN YOUNG AND OLD NORMAL SUBJECTS
UHDE	ALPRAZOLAM AS A TREATMENT FOR PANIC ATTACKS
UHDE	IMIPRAMINE THERAPY IN PANIC ANXIETY DISORDER
UHDE	IMIPRAMINE CHALLENGE EFFECTS ON PSYCHIATRIC PATIENTS AND CONTROLS
UHDE	LITHIUM AUGMENTATION IN PANIC DISORDER *
UHDE	DIPYRIDAMOLE IN THE TREATMENT OF PANIC DISORDER
UHDE	EFFECT OF L-TRIIODOTHYRONINE (T3) ON THE POTENTIATION OF TREATMENTS FOR ANXIETY DISORDER
UHDE	PROPOSED INVESTIGATION: A COMPARISON OF COGNITIVE-BEHAVIORAL AND PHARMACOLOGICAL TREATMENTS FOR SOCIAL PHOBIA
UHDE	EFFECT OF GROWTH HORMONE RELEASING FACTOR (grf) AND CLONIDINE ON GROWTH HORMONE (GH) RESPONSE IN PATIENTS WITH AFFECTIVE ILLNESS, PATHOLOGICAL ANXIETY AND NORMAL VOLUNTEERS
UHDE	CRF STIMULATION TEST IN PANIC DISORDER: EFFECTS OF PERIPHERAL SYMPATHETIC FUNCTION
WEHR	COLD VERSUS DARK THERAPY OF RECURRENT SUMMER DEPRESSION

PRINCIPAL INVESTIGATOR	TITLE
WEINBERGER	EFFECTS OF A SELECTIVE D1 RECEPTOR AGONIST, SK&F 38393, IN SCHIZOPHRENIA
ZAMETKIN	BIOCHEMICAL CORRELATES OF PEMOLINE TREATMENT OF HYPERACTIVE CHILDREN
ZIGUN	S-ADENOSYL METHIONINE AS AN ADJUNCTIVE TREATMENT OF DEFICIT SYMPTOMS OF SCHIZOPHRENIA

NIMH extramural clinical trials are defined as studies of any use of treatment in humans for the purpose of generating knowledge about efficacy and/or safety. From the current portfolio of grants, there will be 65 ongoing protocols in FY 1991. The FY 1991 projected total cost of these trials will be approximately $16 million. The Principal Investigator and title of each clinical trial project are listed below.

PRINCIPAL INVESTIGATOR	TITLE
ABIKOFF, HOWARD B	METHYLPHENIDATE AND MULTIMODAL TREATMENT IN ADHD
BARLOW, DAVID H	TREATMENTS FOR ANXIETY
BARLOW, DAVID H	COUPLES TREATMENT OF AGORAPHOBIA
BELLACK, ALAN S	FUNCTIONAL ANALYSIS OF FAMILY THERAPY IN SCHIZOPHRENIA
BREKKE, JOHN S	LONG-TERM COMMUNITY REHABILITATION OF SCHIZOPHRENICS
CAMPBELL, SCOTT S	BRIGHT LIGHT TREATMENT OF SLEEP DISTURBANCE IN ELDERLY
CARPENTER, WILLIAM T, JR	OUTPATIENT TREATMENT--TARGETED VS MAINTENANCE MEDICATION
CASEY, DANIEL E	ANTIPSYCHOTIC DRUG-INDUCED DYSKINESIAS
DAVIDSON, WILLIAM S II	EFFECTS OF ALTERNATIVE INTERVENTIONS FOR BATTERED WOMEN
DEVANAND, DAVANGERE P	HALOPERIDOL TREATMENT IN ALZHEIMER'S DISEASE
DINGES, DAVID F	PSYCHOBIOLOGY OF HYPNOSIS IN STRESS, PAIN AND SLEEP
EGELAND, BYRON R	AN EVALUATION OF SLEEP:A PROGRAM FOR HIGH RISK MOTHERS

PRINCIPAL INVESTIGATOR	TITLE
FOA, EDNA B	RAPE VICTIMS: PERSISTENT REACTIONS AND THEIR TREATMENT
FRIEDMAN, EITAN	PROTEIN KINASE C IN MANIA & IN LITHIUM'S ACTIONS
GALLAGHER, DOLORES E	MH RISK FACTORS IN CAREGIVING: ASSESSMENT & INTERVENTION
GELLER, BARBARA	NORTRIPTYLINE IN CHILDHOOD DEPRESSION--FOLLOW-UP STUDY
GOLDSTEIN, MICHAEL J	LITHIUM AND FAMILY MANAGEMENT OF BIPOLAR DISORDER
GREENBERG, MARK T	THE PATHS PROJECT:PREVENTIVE INTERVENTION FOR CHILDREN
HECHTMAN, LILY	METHYLPHENIDATE & MULTIMODAL TREATMENT IN ADHD
HEIMBERG, RICHARD G	PHARMACOTHERAPY OF SOCIAL PHOBIA
HENINGER, GEORGE R	MONOAMINE RECEPTOR SENSITIVITY AND ANTIDEPRESSANT DRUGS
HOFFMAN, WILLIAM F	DRUG-INDUCED MOVEMENT DISORDERS IN SCHIZOPHRENIA
HOGARTY, GERARD E	ENVIRONMENTAL-PERSONAL TREATMENT OF SCHIZOPHRENIA
JACOBSON, NEIL S	COMPONENT ANALYSIS OF COGNITIVE THERAPY FOR DEPRESSION
JACOBSON, NEIL S	MARITAL VIOLENCE: COGNITIVE AND PHYSIOLOGICAL CORRELATES
JARRETT, ROBIN B	DOES ATYPICAL DEPRESSION RESPOND TO COGNITIVE THERAPY?
JENIKE, MICHAEL A	PHENELZINE, FLUOXENTINE, PLACEBO TRIAL IN OCD
JESTE, DILIP V	LATE-ONSET SCHIZOPHRENIA:A NEUROPSYCHIATRIC STUDY
JESTE, DILIP V	RISK FACTOR FOR TARDIVE DYSKINESIA IN OLDER PATIENTS
JOHNS, CELESTE A	TREATMENT OF NEUROLEPTIC NONRESPONSIVE SCHIZOPHRENIA

PRINCIPAL INVESTIGATOR	TITLE
KANE, JOHN M	PROSPECTIVE STUDY OF TARDIVE DYSKINESIA DEVELOPMENT
KAZDIN, ALAN E	SOCIAL AND COGNITIVE TREATMENTS FOR CONDUCT PROBLEMS
KELLAM, SHEPPARD G	PERIODIC OUTCOME OF TWO PREVENTIVE TRIALS
KLEIN, RACHEL G	METHYLPHENIDATE IN CHILDHOOD BEHAVIOR DISORDERS
KOCSIS, JAMES H	DIAGNOSIS AND TREATMENT OF DYSTHYMIC DISORDERS
KOOCHER, GERALD P	PREVENTIVE MUTUAL SUPPORT FOR FAMILIES AFTER CHILD DEATH
LASKA, EUGENE M	CLINICAL TRIAL METHODOLOGY IN SCHIZOPHRENIA
LEVY, LEON H	HOSPICE CARE AND THE COURSE AND OUTCOME OF BEREAVEMENT
LEWINSOHN, PETER M	COGNITIVE BEHAVIORAL TREATMENT / DEPRESSED ADOLESCENTS
LIEBOWITZ, MICHAEL R	PHARMACOTHERAPY OF SOCIAL PHOBIA
LOHR, JAMES B	TARDIVE DYSKINESIA: FREE RADICAL MECHANISMS & VITAMIN E
MICHELSON, LARRY	COGNITIVE MODEL OF PANIC DISORDER WITH AGORAPHOBIA
NEALE, JOHN M	FLAT AFFECT IN SCHIZOPHRENIA
PARRY, BARBARA L	CHRONOBIOLOGY OF PREMENSTRUAL SYNDROME
PITMAN, ROGER K	PSYCHOPHYSIOLOGY OF IMAGINAL FLOODING TREATMENT OF PTSD
POMARA, NUNZIO	NORTRIPTYLINE EFFECTS ON ELDERLY DEPRESSED
PRINZ, RONALD J	EARLY INTERVENTION FOR ANTISOCIAL BEHAVIOR IN CHILDREN
RAUSCH, JEFFREY L	PLATELET LSD BINDING & 5HT UPTAKE IN DEPRESSION
REYNOLDS, CHARLES F, III	MAINTENANCE THERAPIES IN LATE-LIFE DEPRESSION

PRINCIPAL INVESTIGATOR	TITLE
RICKELS, KARL M	EARLY DRUG EVALUATION IN NEUROTIC OUTPATIENTS
ROVNER, BARRY W	A RANDOMIZED TRIAL OF DEMENTIA CARE IN NURSING HOMES
SHADER, RICHARD I	APPLICATIONS OF PHARMACOKINETICS IN CLINICAL PSYCHIATRY
SHURE, MYRNA B	INTERPERSONAL PROBLEM SOLVING AND PREVENTION
SIEGEL, KAROLYNN	PARENT GUIDANCE PREVENTION PROGRAM FOR BEREAVED CHILDREN
SILVERMAN, WENDY K	PSYCHOSOCIAL TREATMENT OF CHILDHOOD PHOBIAS
SPREAT, SCOTT	LITHIUM FOR TREATMENT OF AGGRESSION IN RETARDED PERSONS
STEKETEE, GAIL S	EXPRESSED EMOTION IN ANXIETY DISORDERS
SWANSON, JAMES M	EVALUATION OF WITHDRAWAL OF NEUROLEPTIC DRUGS IN THE DD
TERI, LINDA	TREATMENT OF DEPRESSION IN ALZHEIMERS PATIENTS
VUCHINICH, SAMUEL	FAMILY ALLIANCES IN THERAPY AND AT HOME
WEIDEN, PETER J	NEUROLEPTIC NONCOMPLIANCE IN SCHIZOPHRENIA
WEINER, RICHARD D	LONG TERM EFFECTS OF ELECTROCONVULSIVE THERAPY
WILSON, WILLIAM H	PHARMACOLOGICAL APPROACH TO NON-RESPONSIVE SCHIZOPHRENIA
WOLKOWITZ, OWEN M	ALPRAZOLAM - NEUROLEPTIC TREATMENT IN SCHIZOPHRENIA
WURTELE, SANDY K	EVALUATING SEXUAL ABUSE PREVENTION PROGRAMS

OFFICE OF WORKPLACE INITIATIVE

Mr. Natcher: How much have you budgeted for the Office of Workplace Initiatives in your 1991 request versus 1989 and 1990?

Dr. Schuster: The Office of Workplace Initiatives (OWI) was funded at $2.8 million in FY 1989, $2.7 million in FY 1990 and $2.5 million in FY 1991. OWI was originally established to assist in the development of the Federal government's drug screening programs. Now that these programs have been established, the Office continues to play an important role in assisting the operation of these programs by, for example, certifying drug testing laboratories and providing information on the establishment of Employee Assistance Programs. NIDA is also developing a research program designed to provide information on the extent and consequences of drug abuse in the workplace.

ADAMHA STAFFING

Mr. Natcher: Identify projected ADAMHA on-board staffing at the beginning of fiscal years 1990 and 1991 and the end of fiscal year 1991 by major operating component.

Dr. Goodwin: At the beginning of FY 1990, ADAMHA had approximately 1,371 full-time and 470 other (part-time or intermittent) personnel on-board. By the beginning of FY 1991, we expect to have approximately 1,600 full-time and 555 other staff, thus making full use of our FY 91 FTE allotment. The following table shows the approximate breakout among the various institutes/offices of ADAMHA.

	Full-Time Staff		Other Than Full-Time	
	FY 1990	FY 1991	FY 1990	FY 1991
NIMH	711	752	300	310
NIDA	288	407	51	75
NIAAA	145	153	83	87
OSAP	79	106	6	36
OTI	*	48	*	17
OA	148	138	30	29

*OTI had no staff of its at the beginning of FY 1990.

DRAW DOWN OF THE ADMS BLOCK GRANT

Mr. Natcher: Identify by State the amount of funds drawn down to date from the alcohol, drug abuse and mental health block grant for fiscal years 1989 and 1990.

Dr. Goodwin: The following is a record of State draw downs on the ADMS block grant for FY 1989. We are still making awards on the FY 1990 ADMS Block Grant so no draw down information is yet available.

1989 ADMS Block Grant Drawdowns

STATE	ANNUAL ALLOTMENT	As of 3/5/90 Outlay Amount	% of Allotment Drawn
Alabama	12,953,000	10,756,263	83.04%
Alaska	2,734,000	2,448,920	89.57%
Arizona	12,392,750	11,160,903	90.06%
Arizona Indians	104,250	99,800	95.73%
Arkansas	7,000,000	6,367,881	90.97%
California	87,351,000	71,604,162	81.97%
Colorado	11,165,000	9,394,300	84.14%
Connecticut	10,941,000	10,497,226	95.94%
Delaware	2,125,000	1,492,820	70.25%
District of Col.	3,444,000	3,197,098	92.83%
Florida	39,620,000	39,620,000	100.00%
Georgia	15,837,000	14,922,679	94.23%
Hawaii	4,095,000	1,845,285	45.06%
Idaho	2,383,000	2,166,120	90.90%
Illinois	35,699,000	33,987,903	95.21%
Indiana	22,522,000	20,029,318	88.93%
Iowa	4,809,000	3,940,634	81.94%
Kansas	5,543,000	4,910,022	88.58%
Kentucky	7,296,000	5,352,390	73.36%
Louisiana	10,191,000	9,277,561	91.04%
Maine	4,654,000	4,305,657	92.52%
Maryland	12,085,000	12,085,000	100.00%
Massachusetts	25,271,000	23,866,746	94.44%
Michigan	27,271,000	26,833,546	98.40%
Minnesota	8,920,000	6,636,750	74.40%
Minnesota Indians	214,000	160,500	75.00%
Mississippi	6,853,000	6,853,000	100.00%
Missouri	14,318,000	11,989,952	83.74%
Montana	2,964,000	2,509,838	84.68%
Nebraska	3,949,000	3,378,191	85.55%
Nevada	3,890,000	3,872,576	99.55%
New Hampshire	4,627,000	4,182,492	90.39%
New Jersey	31,449,000	27,945,757	88.86%
New Mexico	6,435,000	6,435,000	100.00%
New York	65,794,000	55,375,579	84.17%
North Carolina	14,476,000	14,476,000	100.00%
North Dakota	1,630,000	1,422,500	87.27%
Ohio	36,561,000	28,302,017	77.41%
Oklahoma	9,808,000	9,808,000	100.00%
Oregon	8,111,000	8,034,496	99.06%
Pennsylvania	39,746,000	33,036,976	83.12%
Rhode Island	5,503,000	3,424,518	62.23%
S. Carolina	8,909,000	7,045,177	79.08%
S. Dakota	3,759,000	3,547,570	94.38%
Tennessee	12,098,000	8,285,014	68.48%
Texas	40,166,000	33,172,483	82.59%
Utah	5,686,000	3,761,162	66.15%
Vermont	3,918,000	3,918,000	100.00%
Virginia	14,757,000	13,214,463	89.55%
Washington	14,549,000	14,196,116	97.57%
W. Virginia	5,635,000	4,366,400	77.49%
Wisconsin	10,338,000	5,884,203	56.92%
Wyoming	1,285,000	411,747	32.04%
American Somoa	100,000	100,000	100.00%
Guam	630,000	142,978	22.69%
N. Mariana Is.	100,000	54,686	54.69%
Puerto Rico	9,299,000	8,825,180	94.90%
Palau	14,000	0	0.00%
Micronesia	86,000	0	0.00%
Marshall Islands	36,000	0	0.00%
Virgin Islands	1,215,000	0	0.00%
TOTAL	765,314,000	664,931,555	86.88%

ADMS BLOCK GRANT SET-ASIDE

Mr. Natcher: Identify the shares of fiscal year 1989 funding for data collection and services research allocated to mental health and substance abuse, respectively.

Dr. Goodwin: In FY 1989, $40,280,000 was available in the ADMS Block Grant set-aside to fund data collection, services research and technical assistance. Of that amount, $1,500,000 was obligated for Technical Assistance activities. Within the remaining $38,780,000 for data collection and services research the following amounts were obligated:

	Data Collection	Services Research
Mental Health		
NIMH	$13,289,000	$6,119,000
Substance Abuse		
NIAAA	3,532,000	2,154,000
NIDA	12,000,000	1,686,000
subtotal, SA	15,532,000	3,840,000
Total	$28,821,000	$9,959,000

Mr. Natcher: Identify the number of AIDS IV drug abuse demonstration projects funded in 1987-91 by major subject area.

Dr. Schuster: The information follows:

Number of Demonstrations Per Year

	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991
Grants:					
Outreach	6	30	30	23	1
Treatment	0	0	29	29	29
IV Treatment	0	0	1	1	1
Contracts:					
Outreach	5	8	12	11	11
Information	12	19	11	10	10
TOTAL	23	57	83	74	52

HISTORICAL TABLES--RESEARCH

Mr. Natcher: Update the table provided on pages 562 - 571 of last year's hearing volume, but do not disaggregate figures into AIDS and non-AIDS.

Dr. Goodwin: The information follows.

ADAMHA RESEARCH (including AIDS)
(excluding Research Training and Res. Mgmt. & Support)
(dollars in thousands)

	NIMH	NIDA	NIAAA	Total
Total Research Budget				
1977	104,058	33,994	14,786	152,838
1978	111,189	33,986	16,165	161,340
1979	130,910	42,930	22,196	196,036
1980	143,515	45,972	22,229	211,716
1981	140,295	44,630	21,711	206,636
1982	138,154	41,026	23,337	202,517
1983	152,713	47,501	33,276	233,490
1984	174,967	55,540	42,866	273,373
1985	195,186	64,320	48,785	308,291
1986	204,148	70,553	54,372	329,073
1987	247,011	123,575	71,235	441,821
1988	279,850	130,326	78,643	488,819
1989	332,174	169,924	108,233	610,331
1990 Estimate	389,539	224,496	135,507	749,542
1991 Estimate	413,491	263,100	141,707	818,298
Amount of New and Competing Research Project Grants				
1977	29,036	8,806	2,651	40,493
1978	23,324	9,060	3,735	36,119
1979	34,618	13,131	3,854	51,603
1980	31,510	11,784	3,882	47,176
1981	22,377	8,304	3,227	33,908
1982	27,948	8,863	3,664	40,475
1983	23,466	11,785	6,861	42,112
1984	30,621	15,222	9,502	55,345
1985	43,248	16,384	11,177	70,809
1986	40,093	19,720	11,176	70,989
1987	53,377	39,527	15,538	108,442
1988	59,730	25,192	16,850	101,772
1989	71,609	42,017	24,777	138,403
1990 Estimate	76,273	56,614	32,404	165,291
1991 Estimate	54,513	52,064	14,427	121,004

Number of New and Competing Research Project Grants	NIMH	NIDA	NIAAA	Total
1977	377	124	37	538
1978	301	109	52	462
1979	407	149	51	607
1980	345	134	47	526
1981	228	79	29	336
1982	288	73	40	401
1983	203	97	69	369
1984	276	117	92	485
1985	319	131	100	550
1986	275	132	100	507
1987	362	240	120	722
1988	343	159	111	613
1989	390	234	154	778
1990 Estimate	404	278	190	872
1991 Estimate	278	245	81	604
Total Number of Research Project Grants				
1981	739	353	109	1,201
1982	697	255	108	1,060
1983	565	245	139	949
1984	697	269	187	1,153
1985	763	321	239	1,323
1986	771	359	272	1,402
1987	884	487	319	1,690
1988	925	524	321	1,770
1989	1,045	600	400	2,045
1990 Estimate	1,149	726	467	2,342
1991 Estimate	1,145	796	462	2,403
Percent Funded of Number of Approved Applications				
1977	49%	61%	33%	50%
1978	41%	57%	45%	45%
1979	59%	60%	48%	58%
1980	54%	56%	33%	51%
1981	36%	35%	23%	34%
1982	51%	30%	36%	43%
1983	41%	42%	33%	40%
1984	42%	47%	32%	41%
1985	42%	55%	33%	43%
1986	37%	41%	40%	39%
1987	53%	30%	40%	41%
1988	39%	21%	29%	30%
1989	24%	45%	40%	31%
1990 Estimate	26%	38%	48%	34%
1991 Estimate	16%	28%	20%	20%

Percent Funded of Dollar Amount of Approved Applications	NIMH	NIDA	NIAAA	Total
1980	60%	60%	36%	57%
1981	40%	36%	28%	37%
1982	45%	32%	30%	39%
1983	41%	41%	32%	40%
1984	40%	46%	27%	38%
1985	42%	55%	32%	45%
1986	60%	48%	42%	52%
1987	44%	74%	51%	52%
1988	40%	21%	33%	32%
1989	34%	35%	46%	36%
90% Payline of Funded Projects				
1977	267	256	293	265
1978	259	229	262	254
1979	260	244	221	250
1980	267	236	210	257
1981	220	208	219	219
1982	214	175	198	206
1983	170	170	189	180
1984	170	167	178	172
1985	162	168	182	168
1986	153	176	179	166
1987	151	183	168	165
1988	146	163	154	156
1989	135	155	158	150
1990 Estimate	130	170	200	150
1991 Estimate	120	150	140	130

ADAMHA RESEARCH GRANT AVERAGE COST (including AIDS)
(dollars in thousands)

	1982	1983	1984	1985	1986	1987	1988	1989	1990 est.	1991 est.
Current Dollars										
NIMH................	$107.1	$132.1	$127.8	$137.4	$149.7	$160.4	$168.1	$183.2	$193.0	$206.0
NIDA................	110.7	134.9	146.3	148.2	146.1	169.1	168.6	187.9	205.1	216.4
NIAAA...............	99.3	110.6	109.5	114.2	122.2	135.1	147.5	164.4	174.2	185.2
ADAMHA............	107.2	129.7	129.2	135.8	143.4	158.1	164.4	180.9	193.0	205.5
Constant Dollars										
NIMH................	107.1	125.4	114.0	116.6	122.0	124.0	123.7	128.2	127.8	128.9
NIDA................	110.7	127.3	130.5	125.8	119.1	130.7	124.1	131.5	135.8	135.4
NIAAA...............	99.3	104.4	97.7	97.0	99.6	104.4	108.6	115.0	115.3	115.9
ADAMHA............	$170.2	$122.4	$115.3	$115.3	$116.9	$122.2	$121.0	$126.6	$127.8	128.6
Biomedical Research & Dev. Price Index..	100.00%	105.97%	112.09%	117.79%	122.68%	129.35%	135.86%	142.93%	151.04%	159.84%

NUMBER OF RESEARCH CENTERS (including AIDS)

	NIMH	NIDA	NIAAA	Total
1980	8	8	9	25
1981	11	8	9	28
1982	13	8	10	31
1983	15	6	9	30
1984	20	4	8	32
1985	22	4	9	35
1986	23	8	9	40
1987	28	13	11	52
1988	33	18	10	61
1989	37	18	12	67
1990 Estimate	44	23	14	81
1991 Estimate	45	24	14	83

ADAMHA RESEARCH CENTER AVERAGE COST (including AIDS)
(dollars in thousands)

	1982	1983	1984	1985	1986	1987	1988	1989	1990 est.	1991 est.
Current Dollars										
NIMH	$367.0	$435.0	$464.0	$461.0	$485.7	$730.2	$909.9	$1,053.3	$1,220.9	$1,231.8
NIDA	394.0	464.0	645.0	668.0	435.0	610.2	575.1	688.7	682.7	700.4
NIAAA	598.0	778.0	1,205.0	1,039.0	1,035.4	1,061.5	1,334.1	1,261.2	1,261.6	1,319.4
ADAMHA	448.0	544.0	672.0	633.0	593.9	770.3	880.7	992.6	1,075.1	1,092.9
Constant Dollars										
NIMH	367.0	410.5	338.7	391.4	395.9	564.5	669.7	736.9	808.3	770.6
NIDA	394.0	437.9	575.4	567.1	345.6	471.7	423.3	481.8	452.0	438.2
NIAAA	598.0	734.2	1,075.0	882.1	844.0	820.6	982.0	882.4	835.3	825.5
ADAMHA	$448.0	$444.9	$599.5	$537.4	$484.1	$595.5	$648.2	$694.5	$711.8	683.7
Biomedical Research & Development Index	100.00%	105.97%	112.09%	117.79%	122.68%	129.35%	135.86%	142.93%	151.04%	159.84%

HISTORICAL NUMBER OF RESEARCH TRAINEES (including AIDS)

	1982	1983	1984	1985	1986	1987	1988	1989	1990 est.	1991 est.
NIMH	1,019	963	937	879	839	952	1,000	1,077	1,775	1,206
NIDA	54	53	55	79	79	114	114	114	155	198
NIAAA	68	64	67	69	71	123	129	125	123	129
ADAMHA	1,141	1,080	1,059	1,027	989	1,189	1,243	1,316	1,453	1,533

AVERAGE COST PER TRAINEE

Predoc	$9,190	$9,650	$10,868	$13,386	$13,430	$13,131	$13,257	$14,026	$14,383	$14,514
Postdoc	21,731	22,360	22,433	27,631	27,709	27,092	26,270	28,415	30,399	30,913

PERCENTAGE DISTRIBUTION OF FUNDS BY RESEARCH MECHANISM

Mr. Natcher: Provide a table showing the percentage distribution of funds among research mechanisms for ADAMHA as a whole for fiscal years 1986 through 1991, and for each of the three Institutes individually for fiscal year 1991.

Dr. Goodwin: The information follows.

	ADAMHA FY 1986	% of Total	ADAMHA FY 1987	% of Total	ADAMHA FY 1988	% of Total	ADAMHA FY 1989	% of Total	ADAMHA FY 1990	% of Total	ADAMHA FY 1991	% of Total	NIMH FY 1991	% of Total	NIDA FY 1991	% of Total	NIAAA FY 1991	% of Total
Research Project Grants:																		
Continuations...........	$132,566	32.8%	$160,678	30.5%	$194,260	33.8%	$229,514	32.5%	$284,953	33.2%	$370,897	39.4%	$180,057	37.4%	$120,119	40.4%	$70,721	46.2%
Admin. Supplements......	803	0.2%	2,539	0.5%	2,002	0.3%	2,071	0.3%	1,735	0.2%	1,829	0.2%	1,335	0.3%	88	0.0%	406	0.3%
New/Competing Combined..	70,989	17.6%	108,442	20.6%	99,770	17.4%	138,403	19.6%	165,291	19.2%	121,004	12.9%	54,513	11.3%	52,064	17.5%	14,427	9.4%
Subtotal, RPG.........	204,358	50.5%	271,659	51.6%	296,032	51.5%	369,988	52.4%	451,979	52.6%	493,730	52.5%	235,905	49.0%	172,271	58.0%	85,554	55.8%
Treatment Outcome Research	0	0.0%	2,310	0.4%	0	0.0%	2,282	0.3%	7,803	0.9%	8,335	0.9%	0		[4,248]		[4,087]	
Research Centers..........	24,942	6.2%	40,056	7.6%	53,108	9.2%	66,505	9.4%	87,085	10.1%	90,712	9.6%	55,430	11.5%	16,810	5.7%	18,472	12.1%
Other Research:																		
Research Career Programs.	12,041	3.0%	14,208	2.7%	14,722	2.6%	17,094	2.4%	24,850	2.9%	25,669	2.7%	19,377	4.0%	3,992	1.3%	2,300	1.5%
Cooperative Agreements...	5,147	1.3%	4,710	0.9%	4,608	0.8%	10,408	1.5%	13,096	1.5%	16,090	1.7%	9,667	2.0%	1,052	0.4%	5,371	3.5%
Instrumentation Grants...	0	0.0%	0	0.0%	0	0.0%	2,012	0.3%	2,050	0.2%	1,986	0.2%	1,000	0.2%	504	0.2%	482	0.3%
Small Grants.............	1,389	0.3%	1,676	0.3%	2,143	0.4%	2,836	0.4%	2,556	0.3%	2,860	0.3%	2,482	0.5%	0	0.0%	378	0.2%
Subt., Other Research..	18,577	4.6%	20,594	3.9%	21,473	3.7%	32,350	4.6%	42,552	5.0%	46,605	5.0%	32,526	6.7%	5,548	1.9%	8,531	5.6%
Total, Research Grants	247,877	61.3%	334,619	63.6%	370,613	64.5%	471,125	66.7%	589,419	68.6%	639,382	68.0%	323,861	67.2%	194,629	65.5%	112,557	73.5%
Research Training:																		
Individual Awards.........	2,881	0.7%	3,444	0.7%	3,091	0.5%	3,096	0.4%	5,010	0.6%	5,972	0.6%	3,877	0.8%	1,190	0.4%	905	0.6%
Institutional Awards.....	17,212	4.3%	20,238	3.8%	20,896	3.6%	24,361	3.5%	26,337	3.1%	28,166	3.0%	21,924	4.5%	3,760	1.3%	2,482	1.6%
Total, Res Training...	20,093	5.0%	23,682	4.5%	23,987	4.2%	27,457	3.9%	31,347	3.6%	34,138	3.6%	25,801	5.4%	4,950	1.7%	3,387	2.2%
Res. and Dev. Contracts...	10,606	2.6%	24,005	4.6%	25,557	4.4%	36,571	5.2%	43,097	5.0%	53,408	5.7%	7,762	1.6%	40,108	13.5%	5,538	3.6%
Total, Extramural Res...	278,576	68.9%	382,306	72.6%	420,157	73.2%	535,153	75.8%	663,863	77.3%	726,928	77.3%	357,424	74.2%	239,687	80.7%	121,482	79.3%
Intramural Research.......	70,590	17.5%	85,507	16.2%	92,649	16.1%	102,635	14.5%	117,026	13.6%	125,508	13.3%	81,868	17.0%	24,115	8.1%	19,525	12.7%
Res. Mgmt. & Support......	55,315	13.7%	58,620	11.1%	61,540	10.7%	68,264	9.7%	78,294	9.1%	88,181	9.4%	42,626	8.8%	33,338	11.2%	12,217	8.0%
Total, Research.........	404,481	100.0%	526,433	100.0%	574,346	100.0%	706,052	100.0%	859,183	100.0%	940,617	100.0%	481,918	100.0%	297,140	100.0%	153,224	100.0%

SELF-HELP APPROACH TO MENTALLY ILL

Mr. Natcher: How effective is the self-help approach for the mentally ill?

Dr. Judd: The effectiveness of the self-help approach is currently being evaluated by the National Institute of Mental Health (NIMH). The NIMH Community Support Program supports 14 projects to demonstrate and evaluate a variety of approaches to promote the development of self-help groups for present and former mental health patients.

In terms of research projects, NIMH has funded two recent grants that deal with self-help groups for present and former mental patients. One of these, at the University of Pittsburgh, is following a cohort of individuals discharged from public mental hospitals to determine what characteristics promote successful use of self-help services, what factors lead to drop-out, and what factors promote more successful outcome in those who do use self-help groups or other services. This project is using random assignment to test the outcome of self-help and peer support groups compared to traditional services. Another grant, at the University of Illinois, has been examining the impact of participation in Project GROW, a network of consumer-led self-help groups, on individual outcome, social networks, and friendship patterns; it is also examining the development of the organization over time. In this project, comparisons are being made to matched controls in hospital settings.

In addition, the NIMH funded a new national research center on self help at the University of Michigan in fiscal year 1989. Its major aims are to conduct a research program on self-help services and disseminate knowledge to consumers about effective self-help approaches. It has a special focus on severe disorders and on minority populations.

TRAINING OF AIDS HEALTH CARE WORKERS AND PROVIDERS

Mr. Natcher: How much money are you allocating to the training of health and mental health care workers in the psychological aspects of AIDS?

Dr. Judd: The NIMH has budgeted for $5.9 million to the training of health care workers and providers.

KNOWLEDGE FROM ALCOHOLISM TREATMENT TRANSFERABLE TO DRUG ABUSE

Mr. Natcher: How much of what we know about alcoholism treatment is transferable to drug abuse programs?

Dr. Goodwin: Drug treatment programs have already learned much from the alcohol treatment programs. For a long time, alcohol treatment programs have recognized the value of self-help support groups that provide a philosophy for restructuring a client's life and have incorporated these into their programs. Based on the alcoholism treatment experience, drug treatment programs are using similar groups that emphasize narcotic addiction rather than alcoholism. Also, research has shown that involving the family in alcoholism treatment may contribute to positive treatment outcomes for the alcoholic. Another finding is that cognitive impairment can be both a short and a long-range consequence of alcohol abuse. Most cognitively impaired alcoholics in treatment experience improvement in their cognitive functioning after a few weeks of treatment. But findings from studies of cognitive functioning in alcoholics indicate that information presented during the early weeks of treatment may not be retained. Work in this area suggests that much information that is presented early in treatment should either be repeated later in treatment or postponed until the patient can benefit from it. This may also be true for drug abuse treatment.

Although the specific biochemistry of alcohol and other drugs varies, there are several common aspects in the treatment of drug and alcohol abuse. Both are chronic, relapsing problems with similar physiological and psychological components. Physiological components include the abstinence (withdrawal) syndrome and the development of tolerance. Psychological components may include denial of the problem, conditioned craving, drug- or alcohol-seeking behavior, and dependence behavior. In addition, legal, economic, social, and familial consequences may accompany both alcohol and drug addiction.

In recent years, most clients entering treatment for drug abuse also have an alcohol problem, and the majority of those entering treatment for alcohol problems also abuse drugs. Perhaps, because of the widespread availability of illicit drugs and their use by members of all socioeconomic strata the distinction between treatment of drug addicts and alcoholics has been blurred. ADAMHA currently has a number of ongoing studies which are designed to investigate the treatment of individuals experiencing both cocaine and alcohol problems. For example, pharmacological agents that directly attenuate drinking behavior may also attenuate other drug use. These include serotonin uptake inhibitors (fluoxetine and fluvoxamine), dopamine agonists (bromocriptine), and naltrexone, a narcotic antagonist.

OTI DISASTER GRANTS

Mr. Natcher: Is it the best use of your OTI funds to provide disaster grants to communities to rebuild treatment programs after natural disasters?

Dr. Goodwin: During the time following a natural disaster there is need for increased drug treatment services as well as increased outreach services to addicted individuals. The provision of OTI disaster grants to communities devastated by a natural catastrophe will assist them in restoration of their drug treatment services as quickly as possible. These grant funds will not be used to supplant either FEMA or SBA funds. The funds will only be used for assistance with drug treatment, not to rebuild treatment facilities.

Mr. Natcher: Can this be handled by the Federal Emergency Management Agency and the Small Business Administration?

Dr. Goodwin: The Office for Treatment Improvement is making available to each state only a limited amount of funds for a six month period only. This emergency funding is in addition to FEMA funding which is focussed primarily on non-health aspects of restoring order following a national disaster. These limited funds awarded in conjunction with technical assistance from drug abuse treatment professionals in OTI should help minimize the number of individuals driven to abuse drugs or alcohol as a result of a disaster.

TRAINING PROGRAMS FOR SUBSTANCE ABUSE COUNSELORS

Mr. Natcher: Are there many high quality substance abuse counselor training programs?

Dr. Goodwin: Estimates provided by the National Association of Alcohol and Drug Abuse Counselors (NAADAC) indicate that there are between 100 and 150 organized, on-going alcohol and drug abuse (ADA) counselor training programs in the country, in addition to approximately one thousand individual training workshops and courses offered by independent trainers and non-ADA training providers. Of these, the majority are oriented toward information transfer rather than skill building. The ADA counseling profession now has a fairly uniform philosophy that performance and, therefore, credentialing are linked to skills rather than knowledge. This greatly increases the need for skills training programs to produce measurable results in a clinical setting.

In addition, few programs or workshop/course offerings currently are designed for the continuing education needs of counselors beyond the entry level. Therefore, there is a great need for continuing education programs designed to increase the professionalism and skill level of existing practitioners.

INTRAMURAL ANIMAL FACILITIES

Mr. Natcher: How much have you invested to date in improving your intramural animal facilities?

Dr. Goodwin: I'll answer this question in three parts, based on what NIAAA, NIMH, and NIDA have done, respectively.

NIAAA has obligated $794,000 since fiscal year 1987 to renovate its animal facilities on the NIH campus and at their facility in Rockville, Maryland. Our intramural research program continues to operate its animal care facility in a manner consistent with NIH standards and policies.

For NIMH, I can't give you a precise total cost because much of the additional costs are contained within a larger project. For example, all laboratory renovations are now planned to meet AAALAC accreditation requirements. Special paints, waterproofing and other construction requirements incur additional material and labor costs which we estimate are, on average 50 percent, more than in the past.

Additionally, we have bought new cages and other equipment to meet AAALAC standards, and we have hired two additional veterinarians to assure that our facilities and research protocols are in full compliance with the required standards. Although these additional costs impact considerably on funds available for other research efforts, we are firmly committed to a sound animal program which meets or exceeds required standards.

The NIMH Intramural Research Program operating costs for the purchase, care and maintenance of animals is increasing each year.

FY 1988	$1.8 million
FY 1989	$2.3 million
FY 1990	$2.7 million
FY 1991	$3.1 million

The above figures do not include the cost of upgrading the shared animal facilities. Those costs were provided by the National Institutes of Health.

NIDA maintains its intramural research facility, the Addiction Research Center, at Francis Scott Key hospital on the campus of Johns Hopkins University. Upgrades, costing approximately $65,000, have been made to the animal care facilities at the ARC since FY 1988. These upgrades include such things as installation of an improved cage washer, larger cages for monkeys, installation of a scrub sink, transfer cages, foraging boards, and intensive care units.

RESEARCH ON STEROIDS

Mr. Natcher: What is your current level of effort in steroids research, and do you plan to expand this in 1991?

Dr. Schuster: NIDA is in the process of developing a program on anabolic steroids which will include research on the incidence, prevalence, causes, consequences, treatment and prevention of steroid abuse. Currently 7 proposals have been reviewed; one has been funded and at least one more will be funded this year. A program announcement is being written to solicit grant applications. It is difficult to predict the number of grants that will be awarded in FY 1991, but the program announcement should elicit an increased number of applications. A representative from NIDA is also a co-chair on an HHS taskforce on steroids.

PREVALENCE OF AIDS INFECTION AMONG IV DRUG ABUSERS

Mr. Natcher: What are the most recent estimates of the prevalence of AIDS infection among IV drug abusers?

Dr. Schuster: On a national level, as of the end of January 1990, 28 percent of all reported AIDS cases were clearly identified as intravenous drug abusers, making IV drug abuse the second most common means of transmission of the virus. AIDS prevalence varies geographically across the nation with large pockets of infection on the east and west coasts, with lower prevalence in other areas.

Nonetheless, it is clear that while AIDS cases are heavily concentrated in the largest cities, the epidemic is increasingly affecting smaller communities.

From 1988 to 1989, intravenous drug users with AIDS increased five percent in terms of numbers of cases. Heterosexual contact cases rose 27 percent and perinatal AIDS increased by 17 percent. The category of no identified risk increased the most, by 83 percent. Research has shown that drug abuse treatment reduces the chance of exposure to the AIDS virus by reducing illicit drug use and needle sharing. Rates of infection with the AIDS virus are inversely related to the length of time spent in drug abuse treatment. Thus, drug abuse treatment can be an effective AIDS prevention strategy for certain populations.

SUBSTANCE ABUSE DATA COLLECTION

Mr. Natcher: Funding for substance abuse data collection was significantly expanded in 1989. Is any data now available from the surveys supported with that funding? If not, when might we expect to see improved data?

Dr. Schuster: The expanded funding for data collection has been used to support a number of projects. While work has been initiated on all planned projects, data generally will not be available until later this year at the earliest. Preliminary data based on 6,034 alcohol and drug treatment programs are currently available from the 1989 National Drug and Alcoholism Treatment Unit Survey (NDATUS). Previously conducted every 2-3 years, NDATUS has been expanded to include additional data items and is being conducted annually through the use of set aside funds. Final 1989 NDATUS data will be available in May.

The periodicity for the National Household Survey on Drug Abuse has also been increased to annually. The 1990 Survey is in the field now. Data will be available in December 1990. In 1991, 6 metropolitan areas (New York City, Washington, D.C., Miami, Chicago, Los Angeles, and Denver) will be oversampled in order to provide estimates of drug use in these areas.

A national client data base is being developed through State adoption of a minimum data set in States' own client systems. Implementation will begin this summer with a pilot test of three States. Data will then be available on a State-by-State basis as the remaining States are phased in through the end of 1991.

Pilot studies are currently being conducted to determine the feasibility of collecting Drug Abuse Warning Network (DAWN) data on alcohol-only cases from emergency room and medical examiners. Results of pilot studies for emergency rooms will be available in December 1990, while results for the medical examiner study will be available in December 1991. The DAWN Medical Examiner (ME) system is also being expanded to include medical examiners in all 50 States as well as complete metropolitan area coverage for the cities where emergency room data are also collected. This recruitment effort will continue through the end of 1991, but data will be available as each new ME is phased into the system, a process which has already begun.

The 3-year Washington, D.C. Metropolitan Area Drug Study is largely a methodological study on how to collect data on hidden and hard-to-measure populations, such as the homeless, transient, and institutionalized populations and school dropouts. Sixteen separate studies will be conducted with data available from the first study, the institutionalized subgroup, in March 1991. Results from the other studies will become available over the next 16 months. Oversamples for Washington, D.C. in the National Household Survey will be available in December 1990 and December 1991.

The In Utero Drug Exposure Survey has been initiated; data will be available in March 1992.

Several interagency studies have been funded or planned. NIDA-supported data on cocaine and marijuana use during pregnancy was collected in the 1988 Maternal and Infant Health Study conducted by the National Center for Health Statistics (NCHS), data collection has been ongoing since the study began; final data will be available in July 1991. NIDA is also sponsoring questions on the 1990 Longitudinal Followup to that study. NIDA is sponsoring a drug abuse supplement on NCHS's 1991 National Health Interview Survey; data will be available in 1993.

STAFFING FOR THE OFFICE FOR TREATMENT IMPROVEMENT

Mr. Natcher: Will the Office of Treatment Improvement be fully staffed with the 50 full-time equivalents in your 1991 request?

Dr. Goodwin: Yes, we expect the Office for Treatment Improvement to be fully staffed in FY 1991. The actual number of FTEs is 63 which includes staff previously devoted to administration of the block grant program.

VOCATIONAL TRAINING IN DRUG TREATMENT PROGRAMS

Mr. Natcher: What results are available from the NIDA demonstrations which provide vocational training along with drug treatment?

Dr. Schuster: These demonstrations are five-year research projects that were initiated in late September 1989. The projects are currently enrolling clients into treatment programs and vocational training. The projects are proceeding as planned and on schedule, but it is too early to draw any conclusions from their work.

INCREASES IN THE NUMBER OF GRANT APPLICATIONS VS. FUNDING INCREASES

Mr. Natcher: Has the number of grant applications risen in recent years as funding for your Institutes has increased?

Dr. Goodwin: Yes. In FY 1985 the Agency received 1,418 research applications for review. In FY 1989, that number grew to 2,478. We expect to receive over 3,200 in FY 1991. In addition to these research grant applications we expect to receive over 2,800 applications in FY 1991 for non-research programs principally in the Office for Substance Abuse Prevention and the Office for Treatment Improvement.

NIDA COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS

Mr. Natcher: Has NIDA established cooperative research and development agreements with drug companies as it works with them to develop anti-drug medications?

Dr. Schuster: NIDA is currently negotiating two cooperative research and development agreements (CRADAs) with drug companies. Each company has different attitudes and policies regarding CRADAs. For some companies CRADAs pose no problem; for others, it is a substantial problem. The problems with CRADAs from the industry viewpoint involve licensing and "price control" language in the standard CRADA document. The industry considers the licensing language to be unfair and disadvantageous for chemical entities that they discover. The language on pricing is viewed by the industry as a weapon that could be used against them at some later date, should they be perceived as overpricing a drug. Nevertheless, discussions are continuing and both we and the drug companies fully expect that CRADAs will be developed shortly.

TABLE COMPARING PRESIDENT'S BUDGET WITH REQUESTED LEVELS

Mr. Natcher: Insert a table by activity showing the agency's original fiscal year 1991 request to the Department, the Department's request to the Office of Management and Budget, and the final President's budget, with comparisons.

Dr. Goodwin: The information follows.

ADAMHA FY 1991 "WHO STRUCK JOHN" by Activity 04/10/90

(Dollars in Thousands)

Date: 04/10/90
Time: 08:52 AM

ADAMHA - TOTAL	Request to HHS	Request to OMB	President's Budget	PB vs. HHS + / -	PB vs. OMB + / -
Mental Health:					
Research	$442,801	$419,284	$439,292	-$3,509	$20,008
Res. Mgmt. & Support	41,185	39,729	42,626	1,441	2,897
Subtotal, Research	483,986	459,013	481,918	-2,068	22,905
Demonstrations:					
CSP & Homeless Demos	31,507	32,727	32,868	1,361	141
Protection & Advocacy	8,000	8,000	8,000	0	0
Clinical Training	11,206	11,000	5,000	-6,206	-6,000
Total, NIMH	534,699	510,740	527,786	-6,913	17,046
Drug Abuse:					
Research	253,668	249,016	263,802	10,134	14,786
Res. Mgmt. & Support	26,477	27,369	33,338	6,861	5,969
Subtotal, Research	280,145	276,385	297,140	16,995	20,755
Demonstrations:					
Drug Abuse	151,567	148,546	109,934	-41,633	-38,612
Total, NIDA	431,712	424,931	407,074	-24,638	-17,857
Alcoholism:					
Research	132,658	131,979	141,007	8,349	9,028
Res. Mgmt. & Support	11,935	11,790	12,217	282	427
Subtotal, Research	144,593	143,769	153,224	8,631	9,455
Demonstrations:					
Alcohol (Homeless)	17,561	18,241	9,498	-8,063	-8,743
Total, NIAAA	162,154	162,010	162,722	568	712
Treatment Outcome Research	0	0	8,335	8,335	8,335
Substance Abuse:					
Demonstrations	98,913	98,913	220,253	121,340	121,340
Clinical Training	6,197	6,197	26,894	20,697	20,697
Prev. Mgmt. & Support	10,706	10,706	14,745	4,039	4,039
Total, OSAP	115,816	115,816	261,892	146,076	146,076
Office for Trmt Improvement:					
Treatment Programs	0	0	117,654	117,654	117,654
Trmt. Mgmt. & Supp	0	0	4,055	4,055	4,055
Grants to States:					
Combined Block Grant	826,400	800,000	1,292,775	466,375	492,775
Homeless Grants	36,184	37,585	33,703	-2,481	-3,882
Subt., Grants to States	862,584	837,585	1,326,478	463,894	488,893
Subtotal, OTI	862,584	837,585	1,448,187	585,603	610,602
Buildings & Facilities	4,176	3,176	3,126	-1,050	-50
Off. of the Administrator:					
Prgm. Mgmt. & Support	19,407	10,494	10,494	-8,913	0
SEH Worker's Comp. Fund	1,924	1,924	1,895	-29	-29
Subtotal, OA	21,331	12,418	12,389	-8,942	-29
Total, ADAMHA	2,132,472	2,066,676	2,831,511	699,039	764,835

UNEXPENDED AND UNOBLIGATED BALANCES FOR SUBSTANCE ABUSE ACTIVITIES

Mr. Natcher: Insert a full statement with as much budget data as is currently available on the issue of unexpended and unobligated balances of funds appropriated in fiscal years 1988, 1989, and 1990 for the various substance abuse activities.

Dr. Goodwin: The following table displays budget data by organization for unexpended and unobligated balances in FY 1988, 1989, and 1990. Unexpended balances for the ADMS block grants are recent data through March. However, it is difficult to capture accurate data by program on a monthly basis because the expenditures are accumulated at the Agency level. All of the funds that were available for various substance abuse activities in FY 1988 were obligated and approximately $82 million remains unexpended. Of the unexpended balance, less than 1 percent is attributed to the substance abuse portion of the ADMS block grant and the ADTR block grant. In FY 1989, $243 thousand lapsed and $262 million remains unexpended. Of this amount, $100 million is associated with the substance abuse portion of the ADMS block grants which is approximately 13 percent of the $805 million appropriated for FY 1989. In FY 1990, approximately 70 percent of the substance abuse funds have not been obligated. There is no drawdown data available at this time.

	1988		1989		1990	
	Unob.	Unexp.	Unob.	Unexp.	Unob.a/	Unexp.
NIDA	0	51,886 b/	131	103,541	337,994	N/A
NIAAA	0	22,708 b/	29	46,138	117,886	N/A
OSAP	0	5,602 b/	83	11,593	169,028	N/A
OTI	N/A	N/A	N/A	N/A	123,057	N/A
Block	0	2,068 c/	0	100,382 c/	591,871	N/A

a/ thru February 1990
b/ as of September 30, 1989
c/ unexpended thru March 1990

RECRUITMENT AND RETENTION OF SENIOR SCIENTISTS

Mr. Conte: Dr. Goodwin, with your experience as head of a large and important intramural research program, you are familiar with the problems concerning recruitment and retention of senior scientists at ADAMHA. In your professional opinion, what needs to be done?

Dr. Goodwin: It has become increasingly difficult for the federal government to recruit and retain qualified, highly productive senior scientists.

We are competing with industry and academia for the best minds in biomedical and behavioral research as we have always done. Unfortunately, the gap between their salaries and benefits and ours continues to widen and, as a result, government research programs suffer. Top flight scientists, who should be directing the federal investment of billions of dollars in research, are not usually able to take the 50 percent or more cut in pay that it would require to work in our intramural laboratories or manage our intramural and extramural programs. Benefits such as a portable retirement program, college tuition support, and stock options are inducements not available to the government recruiter.

I think the only long range solution is that the government must become more competitive with industry and academic institutions in the area of pay and benefits. If we expect to maintain the objectivity and incredible productivity of federal research laboratories and the extramural research enterprise into the next decade, special steps must be taken to isolate compensation for research scientists from general government schedules before the situation further deteriorates.

Mr. Conte: Could you share with us some examples of recruitment and retention difficulties?

Dr. Goodwin: The recruitment and retention problem we experience is compounded by the fact that we are losing people trained in and knowledgeable about research issues most important to us, and these people cannot easily be replaced through general scientist recruitment procedures. The process takes time and considerable effort on the part of the agency staff, often without successful result. Perhaps the most public example of this problem is the NIH Directorship which has been vacant for over a year. Within ADAMHA, the NIMH Intramural Program has recruited only one senior scientist from outside the government in the past decade, and that person left the Institute within two years for a private industry position. At NIDA we have been recruiting for a year and still do not have a director the new medications development program. NIDA needs outside expertise for this important new program, but to date, we have been unable to attract the most qualified candidates.

Our intramural researchers, who are a world class group of scientists, are being lured away from our laboratories by lucrative offers from private industry and academic institutions. The NIMH Intramural program has lost at least seven senior investigators in the last four years and numerous research fellows as well. NIDA and NIAAA have experienced similar losses, and many positions still remain vacant in all three institutes.

Competitive salaries are certainly part of the problem--currently the government simply cannot compete with offers of two and two and half times current or government offered salaries. Better benefits are another big part of the problem. Breaks on children's tuition, fully paid retirement, and housing subsidies are examples of the benefits with which the government does not compete. These problems are often compounded by the higher cost of living in the Washington, D.C. area. As one applicant put it, he was not interested in changing to a more expensive location for less money.

Mr. Conte: What are your current efforts doing to try to ensure that enough new investigators will be recruited into research to replace those scientists who will be retiring in the coming years?

Dr. Goodwin: The issue of the "greying" of ADAMHA researchers and consequent need to replace our research scientist pool is of considerable concern. We have approached this problem from a number of directions. First, we have attempted to link the level of research resources to our research training program so that in years in which our research program expands, our training program expands commensurately. Since 1986, we have increased our research training program from 989 Full Time Training Positions (FTTPs) to about 1,533 in FY 1991. This amounts to a 55 percent increase.

Second, we have begun new programs to recruit students into research careers. We have a new M.D./Ph.D. fellowship program and several developmental awards to provide postdoctoral experience to basic and clinical researchers who are not yet independent investigators. In order to stimulate an interest in science among high school students, this summer we will pilot a program to have high school science teachers work in our intramural laboratories. There they will learn about current research issues and scientific techniques being used to study mental and addictive disorders, which we hope they will convey to the classroom. Information about all our research career development programs is being widely disseminated among the scientific and academic communities.

Finally, we have launched a study to determine how well our training programs are working so that we can improve upon them wherever possible. In the future, we will continually monitor progress in replacing scientists who retire and adjust our training and development efforts accordingly.

NIDA MEDICATIONS DEVELOPMENT

Mr. Conte: What research opportunities do you foresee in the medications development field? Where are your priorities?

Dr. Schuster: There is a tremendous array of research opportunities in a variety of areas of drug abuse research. One major area of importance is medications development. The major clinical opportunity right now is to test in humans the agents that have been suggested as possible treatments for cocaine, methamphetamine, and heroin addiction. As a group, these drugs all have serious addiction profiles, and whether or not they are injected, they represent vectors for the spread of HIV and other infectious disease. Trials have either begun or will begin soon for carbamazepine and Gepirone for cocaine, and buprenorphine for heroin. As we increase our clinical capacity, more trials will be undertaken. A more long-term challenge•is to learn how to integrate medications into the broader treatment scheme. Related to these challenges is the need to devise new clinical research methods to test the efficacy of new agents.

We also have a broad array of basic research opportunities, including understanding the biological mechanisms of drug induced reward (euphoria), tolerance, and dependence. The rewarding effects of drugs underlie their abuse, tolerance leads to dosage escalation, increasing the potential for dependence, and dependence helps to maintain addiction by driving addicts to continuously use drugs to avoid withdrawal.

There are an array of research issues related to the behavioral aspects of addiction (addiction is, after all, manifested as a behavioral disorder) that will be profitably studied. To improve our treatment programs, for example, it is important to understand how certain cues prompt the drug craving that so often leads to relapse even in drug free individuals.

We are beginning to see opportunities to understand the genetic basis of addiction. This includes not only possibility genetically transmitted vulnerabilities to addiction, but also understanding, through the application of powerful new techniques of molecular biology, how abuse of drugs affects the genetic control of cellular activity.

We must obtain more information about the specific molecular receptors that mediate the effects of drugs. Once these receptors are identified, we can then create specific blocking and modifying agents to use as medications. In addition, drugs of abuse alter the way that neurotransmitters work. We are just beginning to see how a whole array of peptide transmitters (peptides are small fragments of proteins), which have been identified only in the last ten years, are involved in the addictive process. Understanding the role of these peptides may lead us to entirely new therapeutic modalities.

We urgently need to understand how drugs of abuse affect the developing fetus and what these effects mean for the child. Cocaine dependent babies are a new clinical problem and we have been mobilizing clinicians and scientists to asses the damage in these children and develop animal models so we may understand the bases for drug-induced problems and how to go about alleviating or reversing them.

We also need increased effort in the area of chemistry. Because of the unique problems associated with the treatment of addicts, such as diversion and lack of compliance, we are looking for treatments with little or no abuse potential by devising novel delivery systems, like prodrugs, which the body slowly converts to active substances; sustained release preparations; triggered release preparations; and medications that can be targeted to specific brain regions. These issues raise difficult, but interesting research questions for medicinal and synthetic chemists.

MEDICATIONS DEVELOPMENT

Mr. Conte: Would you share with us what new initiatives are now under way in the medications development area at ADAMHA and NIDA?

Dr. Schuster: Two types of initiatives are under way. The first, is to test as quickly as possible all the agents that have been identified as having possible efficacy in treating cocaine addiction. The second is to integrate the pharmaceutical industry, academic researchers and the Federal Government in the medications development process. Using this issue as a focus, we see for the first time that we can bring together in a coordinated fashion the country's major sources of scientific expertise to deal with the problems of drug abuse and addiction.

NIDA has awarded a contract to examine all the data related to the heroin treatment agent LAAM, with the eventual goal of obtaining FDA approval to market this medication. It appears to have some advantages over methadone because it is longer acting and needs to be taken only three times per week, and because it has a slower onset of action and does not produce the "high " sometimes associated with methadone. Less frequent dosing would increase treatment capacity.

We also have established a new Division within NIDA to undertake the development of new pharmacotherapies. Taken together, the five branches will be able to duplicate most of the activities carried out in a pharmaceutical company. But instead of actually performing most of these activities, the Division of Medications Development (DMD) will work through grants, contracts, cooperative agreements, and Cooperative Research and Development Agreements (CRADAs) to get the work of medications development accomplished. We have already been able to recruit several outstanding people from the FDA and are hopeful of getting some with pharmaceutical industry experience as well. Because of salary and other limitations, however, this may be a difficult task.

We are already working directly with the pharmaceutical industry and have spoken with 30 different companies that may be interested in working with us on the addiction problem. Our discussions with Bristol Meyers have led to an agreement to test their drug Gepirone, and an array of other companies have expressed similar interest. We are frankly delighted with the response we have received because, prior to our overtures, we found little evidence of any activity in the industry to address the addiction problem.

We have also been working closely with the FDA to develop procedures to obtain speedy approval of new medications that are safe and effective for the treatment of addiction. At their request we are developing guidelines needed to establish efficacy and, building upon this, our staff is developing a handbook for investigators to guide researchers through the drug development process.

We are in the process of establishing an interagency agreement with the Washington, D.C. Department of Veteran's Affairs Medical Center to set up a new ward devoted entirely to testing new medications. We are also exploring the possibility of using the VA Cooperative Study Program for large scale clinical testing of new medications.

Finally, a number of important activities are being conducted in our intramural program relevant to this initiative. The ability to conduct clinical and preclinical work intramurally has given us an "in-house" capability to expedite certain types of testing. By building on previous basic research, the Neuroscience Branch at our Addiction Research Center is leading the search for a cocaine antagonist, and our clinical researchers are just now completing what we hope will be a pivotal study of the effectiveness of buprenorphine as a treatment for heroin addiction.

NIDA is also working with the National Institute on Alcohol Abuse and Alcoholism and the National Institute on Mental Health to develop new treatment medications in their fields.

Mr. Conte: What is your best estimate on how long it will take to develop new medications?

Dr. Schuster: Without question, medications development is a lengthy process. The FDA, based on a study submitted to them which analyzed the time it has taken to successfully develop new medications, estimates that it takes an average of 100 months, that is eight and a third years, from the time a drug is synthesized until it is ready for marketing. The Pharmaceutical Manufacturer's Association estimates that the time necessary is between seven and eleven years. We hope to proceed faster on several of the medications currently under development within NIDA, however. Because several of the medications we are currently investigating have been marketed for other purposes, much of the initial work has been completed. While extensive testing will still be required before they can be used in the treatment of drug abuse, if these medications prove effective for drug abuse, they could be ready for use in a considerably shorter time. For those medications that are now being clinically tested, we hope to have information on their effectiveness in the treatment of heroin or cocaine in the next 2 years. Large scale testing could then be required for approval by FDA and widespread use and marketing, bringing the total time to market to 5 to 7 years from now.

Mr. Conte: Could you give us a description of the steps involved in the development of a new medication?

Dr. Schuster: The major steps required to develop a new drug are described here briefly.

Newly synthesized chemicals, called New Chemical Entities (NCEs), require 1.5-3 years of work before they can be tested in humans. NCEs must first be screened for potential activity. If a particular agent appears promising, a batch is synthesized, and used to see how the agent is metabolized by the body, if it has appropriate pharmacological activity in animal models, and if it produces any toxic effects in animals. Only after all these tests are completed can a new NCE be introduced into humans.

Initial human trials (phase I), which establish safety in volunteers and determine reasonable doses, require approximately 1 year. Double blind trials, in which neither the patient nor the doctor knows if an active drug or a placebo is being used (phase II), are required to demonstrate that the new agent is effective. These trials require up to 3 years to complete. The last experimental step is a set of large scale clinical trials that demonstrate efficacy and safety compared to the current best available therapy. Depending upon the endpoint being measured, these trials can require up to 4 more years to complete and evaluate. After the accumulated data is submitted to the FDA for review, an additional 2 to 3 years may elapse before marketing can occur.

To develop a new indication for an already existing medication requires 3 to 4 years. Phase II type trials to establish efficacy and safety for the new indication must be conducted. Approximately 2 to 3 years are required for these trials. FDA then again reviews the data to assure adherence to current policy, a process that can take up to one additional year.

Mr. Conte: If additional funds were made available for medications development, how would they be utilized?

Dr. Schuster: Additional funds would be used for two objectives that must be jointly pursued. First and foremost, we would use these funds to increase our capability to run clinical trials for those already available agents that have been suggested as being effective therapies for cocaine, methamphetamine, and opiate addiction. At the same time we must establish the infrastructure to support an ongoing program that will produce and test new compounds that are specifically developed for the treatment of addictions.

In order to add to our fully engaged clinical capacity, we intend to establish a master list of investigators and clinics that would be willing to run trials for us as compounds became available. Then, we would solicit from this list the number of treatment beds or outpatient slots required for the kinds of trials we wish to run. All trials would be designed, monitored and evaluated by NIDA Medications Development Division staff, but would actually be carried out in cooperating clinics or centers. This arrangement is flexible, cost effective, and will give us the ability to act rapidly to conduct the kinds of clinical trials we will need to demonstrate safety and efficacy.

Besides working with industry to evaluate available agents, a parallel priority is to increase our capabilities for the preclinical chemistry, pharmacology and toxicology that must be done to get new compounds ready for clinical trials. We need an active drug discovery program based in a creative synthetic chemistry effort with the capability for bulk synthesis of new compounds, and we must increase our capability to test pharmacological activity and run required toxicology trials. These trials are quite expensive, testing a single compound to permit clinical trials can cost $350,000, and our current capacity can only handle 4 compounds per year. Already, we are being forced to choose from among those compounds that are available, and we foresee serious bottlenecks holding up potential new treatments for at least the next couple of years. For compounds that show real promise, long-term carcinogenicity and mutagenicity testing, that can cost up to $2 million per compound, will be required prior to marketing.

Mr. Conte: What is the role of basic research in the new medications development? Are you working with NIH?

Dr. Schuster: Basic research builds the foundation upon which the entire medications development effort rests. The advances of the past, and the past decade in particular, are what have presented us with the array of compounds that are available for testing today. We are particularly interested in blockers for particular classes of dopamine and serotonin receptors, which have only recently been discovered, and in the molecular pump that returns dopamine to the nerve cells that release it. We now know that blockade of this pump by cocaine is the molecular event upon which cocaine's addictive properties are based. Research work with animals has been a critical component in our ability to develop this information. Knowledge of the basic mechanisms by which drugs of abuse have their effects in the brain provides the foundation for the development of targeted, effective medications. We anticipate that even more exciting research findings will be developed during this Decade of the Brain.

We have been fortunate that a number of laboratories on the NIH campus have been willing to work with us on medications development. We supply partial support for a number of NIMH labs, one NINDS lab, and we are negotiating to see if we can supply personnel to an NIDDK lab that is working with a compound that may be useful in treating cocaine addition. NIDA has a long history of supporting both intramural and extramural investigators from other Institutes, and we will continue to do this whenever we see a reasonable opportunity for enhancing our research effort.

KEY NIDA DRUG TREATMENT RESEARCH INITIATIVES

Mr. Conte: Dr. Schuster, what are the other key NIDA initiatives that you will be starting in FY 1991 in the drug treatment research area?

Dr. Schuster: Improving drug abuse treatment is NIDA's highest priority. In the past several years, with funds provided by the Anti-Drug Abuse Acts of 1986 and 1988, NIDA has expanded research to improve drug abuse treatment. This expansion has included research on non-pharmacological aspects of treatment as well as the development of new medications for drug abuse treatment. NIDA's drug abuse treatment program consists of three major areas of research: 1) research to improve the effectiveness and efficiency of drug abuse treatment; 2) the development of new medications for the treatment of drug abuse; and 3) health services research directed at improving systematic features in the delivery of drug abuse treatment services.

Health services research seeks to determine how systematic features of the drug abuse treatment system affect the delivery of drug abuse treatment services. Planned for 1991 are studies on why the treatment system has evolved as it has, why it differs from State to State, what forces are currently at work that will change it, why costs differ in different settings, and what influences the services delivered. Studies will also be made of the extent and adequacy of coverage for substance abuse services. This will include investigations of the quality, cost, and effectiveness of treatment and will address such issues as expanded drug abuse coverage in both the public and private sectors. Other studies will include a longitudinal analysis of health care costs and the use of health care services by individuals and their families with drug abuse problems.

ADEQUACY OF HEALTH CARE SYSTEM TO RECOGNIZE AND REFER ALCOHOL ABUSERS

Mr. Conte: Dr. Gordis, in your professional judgment, do you think the health care system adequately recognizes and refers for treatment, individuals whose problems are caused by the misuse of alcohol?

Dr. Gordis: No, I don't think so. Physicians often fail to diagnose alcoholism in alcohol-dependent patients whose medical problems are caused or exacerbated by alcohol. A recent study conducted in one hospital setting indicates that physicians fail to detect alcoholism in as many as 50 percent to 75 percent of their patients, with substantial variation across specialty (Moore et. al, 1989). Even when they do diagnose an underlying alcohol problem, physicians may not follow through by referring the patient to treatment for alcoholism. This reflects, at least in part, the fact that many physicians and other health care providers are not trained to recognize or manage alcoholism.

Efforts are underway to address these health care system problems through our Health Professions Education Program. The NIAAA, in collaboration with the National Institute on Drug Abuse, has supported the development of curriculum models and materials which demonstrate methods of implementing alcohol and drug abuse teaching as an integral part of health professions training. In addition, the Institutes are currently supporting a Faculty Development Program in Alcohol and Drug Abuse, targeted to faculty in schools of medicine, nursing, social work and clinical psychology. Through this program, the Institutes plan to develop a cadre of health professions faculty who can provide the expertise and leadership needed to conduct programs of alcohol and drug abuse clinical training for health professionals.

NIAAA SHARING RESEARCH FINDINGS WITH THE MEDICAL COMMUNITY

Mr. Conte: Dr. Gordis, can you tell us how do you share your research findings with the medical community?

Dr. Gordis: NIAAA communicates current research findings and information on clinical practice to the medical community in a variety of ways. The major ways are the following:

o The Alcohol Research Utilization System (ARUS), which collaborates with the alcohol field in the systematic review and documentation of current knowledge and its dissemination. Examples of ARUS conferences specifically targeted toward the medical community include conferences held in conjunction with the American Society of Addiction Medicine (ASAM) on Alcohol Detoxification, Recent Developments in Neuroscience for the Clinician, AIDS and Chemical Dependency, and Molecular Biology and Addiction: Introduction for Clinicians. Additional ARUS conferences relating to the medical community include one on the Post-Injury Treatment of Patients with Alcohol-Related Trauma; a conference on Alcohol and Hypertension and Alcohol and Coronary Artery Disease; and a conference on Future Directions in Medical Education. Additional ARUS conferences to transmit research knowledge to the medical community are planned for the future.

o The "NIAAA Alcohol Alert" a quick response publication, which expedites transfer of current and late-breaking information about alcohol abuse to physicians and other health professionals. Since its introduction in mid-1988, seven issues of Alcohol Alert have been developed and widely disseminated to clinicians and other interested individuals. Topics that have been addressed include: alcoholism treatment for the methadone maintained patient, alcohol and cognitive impairment, alcohol and aging, alcohol and trauma, alcohol withdrawal, craving and relapse, and alcohol epidemiology. Approximately 20,000 to 30,000 copies of the Alcohol Alert are distributed to nearly 8,000 treatment centers throughout the country, and to selected members of professional organizations such as the American Medical Association, the American Public Health Association, and the American Psychological Association. In addition, the Alert is distributed at 15 to 20 professional conferences annually.

o A computerized alcohol problems science database, which is available to the public, is maintained by NIAAA online through BRS Information Technologies. The database, which goes by the acronym ETOH, contains over 65,000 bibliographic titles with abstracts from the core journals on alcohol and related topics, and covers the biomedical and psychosocial aspects of the field. It is accessible via modem and telephone from personal computers.

o Alcohol Health and Research World, NIAAA's quarterly magazine, which disseminates research findings and information on alcohol treatment and prevention issues to practitioners, policy makers and others. It is designed for the technically interested and circulated to approximately 6,000 subscribers. It is written at the level of "Scientific American" magazine.

- Routine data bulletins prepared by NIAAA to keep the field abreast of trends in alcohol problems and the latest available information from epidemiologic research.

The Special Reports on Alcohol and Health, prepared every third year for the Congress, documents research progress in understanding the health consequences of alcohol related problems including genetics, medical consequences, alcohol use and pregnancy, diagnostic criteria and screening instruments, prevention, early intervention and treatment. The newly released "Alcohol and Health VII," (1990), has been widely hailed for its scope and quality. Distribution of the Special Reports on Alcohol and Health includes mailing a flier announcing availability of the Report to deans of schools of medicine, psychology, social work, nursing, psychiatry, and other health-related disciplines. It is sent, also, to health professional organizations, State alcohol and drug abuse program directors, and university libraries. As with many of NIAAA's publications, it is distributed at 15 to 20 professional conferences annually. Approximately 10,000 copies are distributed each year.

- Quick Facts, another electronic data base, consists of up-to-date epidemiologic information on alcohol abuse and alcoholism, is available on-line to any individual possessing a personal computer with a modem.

- Through the Institute's Exhibit and Conference Management Program, publications and information about grant applications and important areas for research are made available at more than fifteen professional meetings annually.

IDENTIFYING AT-RISK INDIVIDUALS THROUGH GENETIC RESEARCH AT NIAAA

Mr. Conte: Dr. Gordis, your institute is conducting considerable research in the area of genetics. How has this research benefitted the identification of at-risk individuals?

Dr. Gordis: Progress in genetics over the last 15 years has led to our recent initiation of a large multi-site study to identify the gene or genes that confer vulnerability to alcoholism. Success in this enterprise would have several payoffs. Among them would be a more precise way to identify high-risk youth; this in turn would permit more targeted intervention and prevention activities. The following is the background on this effort: Recent studies have demonstrated the interaction of genetic and environmental factors in the development of alcoholism. As a result of these studies, two subtypes of alcoholism have been identified. For the more common type (Type 1), environmental as well as genetic factors influence the development of alcoholism. For the second type (Type 2) which is male-limited and typically has an early onset, genetic factors play a larger role in influencing the development of alcoholism. Appropriate clinical categorization of patients based on this knowledge would lead to more effective prevention and intervention strategies.

Several potential biological markers are under study and may help identify individuals at high risk for alcoholism. For example, young sons of alcoholics identified as family history positive (FHP) and matched controls identified as family history negative (FHN) have revealed significant differences in brain electrical activity between the two groups. In addition, anomalous event-related potentials (ERP) waves have been detected in young, non-drinking sons of alcoholics without administering alcohol to the subjects. Furthermore, sons of alcoholic fathers have demonstrated decreased intensity of reaction to alcohol, such as subjective feeling and changes in levels of prolactin, cortisol, and adrenocorticotropin hormone (ACTH). A few enzyme markers, such as monoamine oxidase, adenylate cyclase activity, alcohol dehydrogenase, are also promising in identifying people at risk.

Rapid advances in molecular biology allow alcohol researchers to search for linkage between alcoholism and well-defined genetic markers. NIAAA has funded a multi-disciplinary, multi-site collaborative study to delineate the genetic basis of alcoholism in a systematic manner. This project was began in September 1989 and will last five years until fall 1993. DNA samples will be collected from a large pedigree and linkage studies will be performed using current molecular genetic and statistical methods.

In summary, genetics research supported by NIAAA has made significant strides in recent years. Knowledge of risk factors, clinical and psychosocial characteristics of alcoholic subgroups, and linkages with specific DNA probes will help to clarify the biological and genetic mechanisms of susceptibility to alcoholism. Studying the interaction of genes with environmental factors that increase or diminish the risk of alcoholism may well be the key to effective prevention or treatment of this major health problem.

LONG-TERM ALCOHOLISM RESEARCH PRIORITIES

Mr. Conte: Dr. Gordis, what are your long-term research priorities in alcoholism research?

Dr. Gordis: NIAAA has a number of important long-term research priorities in the biomedical, behavioral, and clinical research areas. In the biomedical research area, the Institute has undertaken an effort to identify the genetic factors that predispose some individuals to alcoholism. This research is being supported through both regular research grants and a large scale cooperative agreement for collaborative research involving a number of universities. Identification of such genetic factors would be an invaluable contribution in resolving the mechanism by which this disease develops, and would prove to be of considerable importance in the advancement of treatment and prevention methodologies.

A related long-term research priority is the identification of objective biological markers for alcohol consumption. Such markers would be tremendously valuable in a number of domains: They would afford a means to measure compliance in alcoholism treatment thereby increasing the efficacy of alcoholism treatment; they would provide a laboratory basis for the identification of alcohol-related disease; and they would provide a means to more accurately establish the extent of alcohol abuse and alcoholism.

In the clinical research area, the Institute is giving very high priority to developing improved methods of matching patients to the specific types of treatment which are most effective for them. In this regard, the Institute has recently established a large scale cooperative agreement involving a number of treatment research experts from throughout the country to compare treatment effects for different types of patients in different sites. These multi-site trials should produce highly valid and generalizable results of usefulness to the alcoholism treatment field.

In line with the overall priority of the Alcohol, Drug Abuse, and Mental Health Administration to develop new medications for the treatment of brain and behavioral disorders, the Institute has recently developed an announcement to encourage research on new medications to address a number of alcohol-related problems including the treatment of alcohol withdrawal and the protracted withdrawal syndrome and the attenuation of drinking associated with the phenomenon of craving.

Another long-term research priority is directed toward understanding the role of alcohol in the development of serious and often fatal medical disorders including liver disease, heart disease, gastrointestinal disorders, and brain damage. Research on the role of alcohol in suppressing the immune system and increasing the likelihood of HIV infection, AIDS or other infectious diseases is also of great importance.

With prenatal injury from alcohol recognized as one of the leading known causes of mental retardation in the country, especially among Indians and other minorities, a priority issue is the elucidation of the mechanism of such injury and the development of appropriate interventions to mitigate detrimental consequences as tragically seen in the fetal alcohol syndrome.

The Institute is also pursuing enhanced knowledge on effective prevention techniques in a diverse array of approaches including educational programs, media interventions (including an assessment of the effectiveness of warning labels), legal deterrents, work site prevention strategies, and community-based intervention strategies.

As you can see, the research effort on alcohol abuse and alcoholism must be multi-disciplinary and multifaceted in order to address the complex and pervasive impact of alcohol consumption on the individual, the family, and the community.

The fact that alcohol is a major problem in America makes these varied research priorities both urgent and essential for the health and well-being of our society.

ENZYME RESEARCH IN ALCOHOLISM

Mr. Conte: Dr. Gordis, can you tell us what is new in the field of enzyme system research and how it could help in future treatment of alcoholism?

Dr. Gordis: The major alcohol metabolizing enzyme system involves alcohol dehydrogenase (ADH) and aldehyde dehydrogenase (ALDH). Various genetically defined molecular forms have been found in Asians, blacks, and some Europeans. An inactive form of ALDH found in some Asian populations is responsible for the alcohol flushing reaction and may deter these individuals from excessive drinking. A recent study also showed that the first-pass metabolism of alcohol in the stomach is slower in women than in men, thus explaining, in part, the gender difference in alcohol metabolism.

Several enzyme markers are important because they are associated with the genetic transmission of alcoholism. Levels of monoamine oxidase (MAO), which are lower in individuals with a number of psychiatric and personality disorders than in unaffected persons, are also consistently lower in alcoholics. Male alcoholics and their sons show an abnormality in the kinetics of a thiamine-dependent enzyme, transketolase, as compared to controls. Another promising enzyme marker under investigation is stimulated adenylate cyclase activity, which is significantly lower in alcoholics in some cases, even during prolonged abstinence.

These findings will help identify individuals at high-risk for alcoholism and therefore will have direct implications in formulating treatment and prevention strategies. I will also mention a few enzyme studies that may lead to improved treatment of alcohol-induced pathology.

It has been reported that chronic alcohol feeding produced a 5-fold increase in microsomal P-450, and a smaller but significant increase in glutathione transferase in esophageal and stomach mucosal tissues in rats. Glutathione and UDP glucuronic acid levels were, however, unchanged. Since carcinogens can be activated by P-450 but are removed by conjugation to glutathione or UDP glucuronic acid, these results suggest that the increased risk of esophageal cancer associated with alcohol abuse may be partially due to alcohol altering the balance between carcinogen activation and detoxification. Another study helps to explain alcohol-related injury to organs where alcohol is not known to be oxidized. Researchers have recently reported a nonoxidative pathway in the metabolism of alcohol, involving the esterification of alcohol with fatty acids. The enzyme fatty acid ethyl ester synthase has been found in a number of organs such as brain, heart, and pancreas and the resulting fatty acid ethyl esters are thought to be responsible for alcohol-induced damages in these organ systems.

ADM BLOCK GRANT ACCOMPLISHMENT

Mr. Conte: Dr. Goodwin, tell us what you have accomplished with the ADM block grant over this past year.

Dr. Goodwin: Due to the many changes authorized in the Anti-Drug Abuse Amendments of 1988 (P.L. 99-690), last year was a particularly exciting one for the Alcohol, Drug Abuse, and Mental Health Services (ADMS) Block Grant. The new law, coupled with the creation of the Office for Treatment Improvement (OTI), impacted on a wide range of activities from financial increases to programmatic changes to more technical assistance. The following is a description of some of the accomplishments of the previous year:

OTI successfully awarded the $806 million ADMS Block Grant, an increase of almost $300 million over the previous year. A significant amount of this money went for much needed treatment expansion.

We implemented the first year of the block grant set-aside authorized by congress for Data Collection, Health Services Research, and Technical Assistance. All of this $42 million will serve to improve treatment of ADM disorders.

One significant use of the set-aside funds was a national conference on Treatment of Adolescents with Alcohol, Drug Abuse, and Mental Health Problems, which provided technical assistance on the children's earmark requirement included in the 1988 Amendments.

Much of our staff time and energy went into providing the technical assistance necessary for States to successfully implement the extensive earmark requirements included in the Amendments of 1988.

The block grant "Drawdown" issue was successfully addressed by identifying obstacles and helping States draw down their block grant funds in an appropriate and timely manner.

The ADMS Block Grant program is being successfully managed during a period of transition, with rising appropriations, and more importantly rising expectations.

Perhaps most importantly we are continuing to maintain excellent relations with the National associations and State agencies administering the program.

OBSTACLES TO ACCOMPLISHING RESEARCH OBJECTIVES

Mr. Conte: Dr. Goodwin, what obstacles do you face that would make it difficult for you to accomplish ADAMHA's research objectives?

Dr. Goodwin: There are three primary issues which come to mind in response to your question. First is the one we discussed earlier: recruitment and retention of senior scientists. Beyond this, we must ensure that there is a nationwide cadre of trained scientists able to contribute to our expanding knowledge base in the mental and addictive disorders. We believe that adequate research training support combined with special recruitment efforts directed at high school and college students should help ensure that sufficient numbers of scientists remain committed to the ADM field.

A second obstacle is the impact of the world-wide animal rights movement. This is important to all biomedical researchers, but it is especially critical to the study of mental and addictive disorders. The use of animals is necessary to understanding the response to craving, for example. It cannot be done using a clump of cells in a petri dish or through computer modeling. For many scientists, the animal rights activists have become discouraging at the least, and life threatening in some extreme cases. This climate can affect many choices individual scientists make, such as which field of expertise to enter into and which experiments to conduct. These choices can seriously impact what we learn about debilitating disorders.

Finally, I would cite funding. It is important for a research field, like the stock market, to exude an impression of stability. If we ask young people to invest their professional lives in this important endeavor, we have to be able to assure them that our investment is a steady one, and that we can be counted upon to support research in the mental and addictive disorders at a steady pace. There was an unfortunate funding constriction in the recent past, for which we continue to pay a great price. Scientists were especially discouraged from working in the field of addictive disorders, and today we have only a small cadre of experienced researchers in that area. The solution to public health problems of the magnitude of mental and addictive disorders will require a long term dedication of many resources, human and financial. We must be committed to supporting them.

FUTURE ROLE OF ADAMHA

Mr. Conte: ADAMHA is a special organization of the Public Health Service. It includes all aspects of health services in its mission - research, prevention, and treatment. How do you envision the role of ADAMHA in the coming years?

Dr. Goodwin: Providing for the public health can be seen as a continuum which encompasses the three aspects you cite: research, prevention, and treatment. For the mental and addictive disorders, all of these are combined within ADAMHA. This provides us the opportunity to link results directly to prevention and treatment services. This can take the form of service demonstrations, prevention demonstrations, medications development, and even more effective clinical training programs. Knowledge gained in the research area has the advantage of being tested in actual service delivery settings before being disseminated to the treatment community for general use.

This vertical integration of research, prevention, and treatment activities within one agency has both advantages and disadvantages. Knowledge development and transfer to the community should be more efficient in this mode. Unfortunately, it may also serve to keep treatment and prevention of these disorders outside the mainstream of medical care and in a separate treatment system.

The Institute of Medicine is conducting a study which will compare the NIH and ADAMHA structures. It will give us some insight into which, on balance, offers a better structure for our common goal of understanding human biology and thereby reducing the morbidity and mortality of disease. I look forward to their report which should be completed by June 1991.

BLOCK GRANT SET-ASIDE

Mr. Conte: Dr. Goodwin, as you know, the 1988 Anti-Drug Abuse Act significantly revised the ADM Block Grant program which provides funds to States for treatment and prevention services. One aspect of those revisions was the establishment of a "tap" of 5 to 15 percent for data collection, technical assistance, and health services research. How is this set-aside helpful to the fields mentioned?

Dr. Goodwin: The block grant set-aside provision and the data collection requirements in the 1988 Anti-Drug Abuse Act provide us with resources to answer the national level essential alcohol, drug, and mental health policy questions. Among these are:

1. How many people are becoming ill and how many that are ill are recovering?

2. What is the need and demand for mental health, drug and alcohol treatment, and what treatment is being received from the treatment sectors of the health care system?

3. What is the impact of drug and alcohol use on the short-term general hospital admissions, length of stay and hospital costs?

This information will provide data for planning purposes, to determine how many and what types of treatment facilities are needed and how resources can best be allocated to meet these needs.

Services research funded from the block grant set-aside currently includes a multi-site clinical trial on the effects of more specifically matching patients to different treatment. A rich literature has developed in the recent past, suggesting that substance abuse treatment that are more individualized to patient characteristics are more effective than generalized rehabilitation approaches. While these studies have yielded exciting results, three important questions remain: What are the most important patient characteristics to be considered in choosing treatment for a patient? What are the optimal matches between patient groups and currently available varieties of interventions? and To what extent can the earlier research findings be generalized to more heterogeneous patient populations, such as those served by state-funded programs?

This research is being conducted under cooperative agreements. This mechanism allows close coordination among the expert principal investigators, the geographically-dispersed research sites, and institute researchers. A Coordinating Center and eight diverse, U.S.-representative treatment programs are involved. The results of this project are likely to have a major impact on substance abuse treatment in the United States.

Another new initiative begun in the services research arena was a multi-year investigation of drug abuse treatment effectiveness based on a nationwide purposive sample of drug treatment programs was contracted. The primary goal of this research is to determine the effectiveness of drug treatment within type of drug of abuse, type of treatment, and level of impairment as measured by changes in the use of the primary problem drug, use of other drugs, criminal behavior, and employment. The Methadone Maintenance Quality Assurance System is being designed to monitor the quality of treatment being provided by registered methadone maintenance programs. In coordination with the criminal justice system, a comprehensive study of a variety of justice related treatment approaches has been initiated to help identify the most effective types of treatment. The purpose of this study is to examine the comparative merits and impact of a variety of types of treatment in a range of criminal justice settings and among different levels of offenders.

The set-aside has also funded research into the incidence and examination of service delivery to persons with co-occurring alcohol, drug abuse or mental health disorders. NIMH is leading this collaborative ADAMHA-wide effort to develop an expanded co-morbidity research plan.

During FY 1989, $1.5 million of the Block Grant set aside was used to provide technical assistance to State alcohol, drug abuse and mental health authorities. In order to assure that ADAMHA technical assistance comported with the needs of State and local treatment programs, ADAMHA contracted with the National Association of State Alcohol and Drug Abuse Directors and the National Association of State Mental Health Program Directors to poll State officials on both service and management issues concerning which the Federal Government might be of assistance.

BLOCK GRANT SET-ASIDE

Mr. Conte: Why did you increase the tap from 5 percent in FY 1990 to 5.7 percent in FY 1991?

Dr. Goodwin: The FY 1991 request for the ADMS block grants includes $10 million to be used exclusively as an addition to the previous 5 percent set aside for expanded data collection activities in the drug abuse area.

NATIONAL NEURAL CIRCUITRY DATABASE

Mr. Conte: I hear that you are in the early stages in starting a National Neural Circuitry database. Can you explain to us what that is?

Dr. Judd: The NIMH has issued a contract to the Institute of Medicine (IOM), National Academy of Sciences, entitled "A National Neural Circuitry Database: Development of a Shared Resource for Basic and Clinical Neuroscience" also referred to as the "Human Brain Project." The purpose of the contract is to evaluate the feasibility of establishing a three dimensional, computerized map of information on brain anatomy, physiology, circuitry regional biochemistry, and behavioral function, for use by researchers, clinicians, and educators. Recommendations from the IOM are expected to be forthcoming at the beginning of next fiscal year (FY 1991).

Mr. Conte: How much is needed in FY 1991 to get it started?

Dr. Judd: In anticipation of the IOM report on the NIMH Human Brain Project, implementation plans will focus on: a) overall coordination; b) software development - to create a uniform software interface and communications system for the project; c) data collection at different levels of neuroanatomy, from molecular to system; and d) advanced technology contracts - to anticipate and solve problems in future development areas such as three dimensional graphics, parallel processing, high speed computer communication and query system, and computer data processing algorithms. Cost is estimated at $10 million.

NEW NIMH CENTERS

Mr. Conte: Dr. Judd, I understand that you hope to get 3 new center programs off the ground: one for a PET center, one devoted for schizophrenia, and one for neuroscience research. The budget didn't provide for these centers. Why are these programs important?

Dr. Judd: The PET center is important because it can provide important insights into the way the brain is dysfunctional in the major mental disorders. The schizophrenia center will integrate basic and clinical neuroscience strategies for studying this devastating disorder. The neuroscience center will support basic research encouraging innovative approaches to fundamental scientific questions on the frontier of neurobiology.

Mr. Conte: How much would it cost to start the centers in FY 1991?

Dr. Judd: The three centers would cost approximately $5.4 million to start in FY 1991.

MISCONDUCT IN SCIENCE

Mr. Conte: Dr. Goodwin, how can ADAMHA and other science agencies ensure an adequate response to misconduct in science--one that would ensure public confidence in research without creating overly burdensome regulations that would stifle good science?

Dr. Goodwin: Two new PHS offices were created in March 1989 to deal more effectively with investigations of misconduct in science. The Office of Scientific Integrity (OSI) is the lead office within the PHS responsible for monitoring and investigating allegations of scientific misconduct. The Office of Scientific Integrity Review (OSIR) is located in the Office of the Assistant Secretary for Health to ensure the independence of the review process from the investigative process. The OSIR oversees scientific misconduct operations of all PHS research agencies. Cases involving ADAMHA support are monitored by the OSI in collaboration with the ADAMHA Misconduct Policy Officer and myself.

The primary responsibility for dealing with misconduct in science lies with the awardee and applicant institutions. As of January 1, 1990, each institution applying for or receiving PHS funds for research, research training or research related activities was required to have an assurance on file with OSI. This assurance states that the institution has policies and procedures in place for investigating and reporting instance of alleged or apparent misconduct in science.

The vast majority of institutions had policies and procedures in place prior to the August 1989 publication in the Federal Register of Responsibilities of Awardee and Applicant Institutions for Dealing with and Reporting Possible Misconduct in Science. Therefore, the regulations have not been overly burdensome for the research community.

The PHS Executive Committee on Scientific Integrity will be developing plans for disseminating information describing the scientific integrity program of the PHS. Public confidence will be maintained by additional educational efforts regarding the benefits and process of science.

Mr. Conte: Dr. Goodwin, some have suggested random audits of scientists along the lines of IRS audits, what would be your view of a random audit that included a review of scientific data and results?

Dr. Goodwin: The 1989 Institute of Medicine report, "The Responsible Conduct of Research in the Health Sciences", explicitly recommended that random data audits should not be implemented. ADAMHA concurs with that recommendation.

Random data audits conducted without cause would have a negative impact on all aspects of science. The introduction of auditors into the scientific laboratory would create an atmosphere of defensiveness and secretiveness. Spontaneity and creativity in research would be diminished dramatically.

Random audits would also undermine the principles of collegial trust and integrity that are essential to academic research.

Random data audits are unlikely to identify the dishonest researcher. Unscrupulous researchers may fabricate raw data for the audit process. Thus, fraud would not be detected.

Costs of an audit program are likely to be prohibitively high.

Extensive scientific expertise would be needed for each review. Since the number of instances of scientific misconduct is small relative to the amount of research conducted, an audit program would not be cost-effective.

MENTAL HEALTH AND OTHER DRUGS

Mr. Conte: Dr. Judd, as you know, many people with mental illness suffer from substance and alcohol abuse as well. What is your institute doing to address these inter-related illnesses?

Dr. Judd: In 1989 the NIMH, in collaboration with NIAAA and NIDA, issued a special announcement to encourage applications for research on services for persons with mental disorders that co-occur with alcohol and/or drug abuse disorders. We have since funded six research projects in this area. In March 1990 the NIMH, NIAAA, and NIDA reissued the announcement to make it known that funds were now available to support both research studies and research demonstrations focused on ways to improve delivery of care to persons with co-occurrent mental health alcohol, and drug abuse disorders. In addition, the three Institutes issued another special announcement in March 1990 to encourage research on prevalence of and services for co-occurrent mental health, alcohol, and drug abuse disorders among American Indians, Alaskan Natives, and Native Hawaiians.

Mr. Conte: In your professional judgement, how much is needed to support these projects?

Dr. Judd: Co-occurrence of alcohol and/or drug abuse disorders with mental illness appears to be increasingly common in our society, particularly among young adults afflicted with severe mental illness. There is a clear need for ADAMHA to expand its research efforts in these areas, and we are hopeful of an excellent response from the nation's research community to the two announcements that have recently been issued. We cannot estimate what funds will be needed to support this new initiative until the first round of applications have been reviewed and evaluated.

BASIC BIOMEDICAL RESEARCH

Mr. Conte: Dr. Judd, basic biomedical research is the best investment we can make in understanding mental disorders and finding better treatments. Can you tell us about the future outlook for molecular genetics and neurobiology in mental health?

Dr. Judd: Both molecular genetics and neurobiology are helping us explain the fundamental mechanisms that result in diseases of the nervous system. Psychiatric disorders are particularly difficult to approach because there may be a broad expression of illness and no consistent biochemical markers available. Using molecular genetics different components of the nervous system can be studied individually or together and then used to find out whether these molecules are involved in the pathogenesis of psychiatric or neurologic disorders. In addition to identifying mechanisms of disease, the power of molecular genetics allows one to develop a wide variety of treatment strategies, including drug modeling, gene therapy, and identification of individuals at risk for psychiatric disease that may benefit from specific treatments.

Recent advances in molecular genetic linkage techniques have greatly increased the likelihood that we will be able to identify specific genetic contributions to major psychiatric disorders. This field has made dramatic progress over the last decade and has become a major focus for research on the causes of schizophrenia, bipolar (manic-depressive) mood disorder, Alzheimer's disease, and other complex and severe mental disorders.

POLYMERASE CHAIN REACTION (PCR)

Mr. Conte: What role will the PCR reaction play in your research efforts?

Dr. Judd: The polymerase chain reaction (PCR) is a molecular genetic technique that amplified specific DNA fragments potentially millions of times. This process allows the researcher to copy a piece of DNA many times with a high degree of accuracy, greatly simplifying the process of sequencing specific DNA fragments.

Many of the molecular genetic projects funded by the NIMH have adopted this technique. The Institute has also prioritized the further development of these techniques and is supporting projects focused on the application of "state of the art" techniques to genetic analyses of schizophrenia and other severe mental disorders.

The polymerase chain reaction (PCR) technology has been enormously valuable to scientists within the IRP, both increasing the speed with which experiments can be done and decreasing the expense. Because the technology permits one to study minute quantities of nucleic acids (DNA or RNA), the study of extremely small patient samples is facilitated. This is particularly useful when studying nervous system disorders because tissue samples of the affected regions of the nervous system are relatively scarce. In addition it provides a powerful tool for the study of specific gene mutations responsible for psychiatric and neurologic disorders, and for facilitating linkage analyses of disorders affecting the nervous system.

Mr. Conte: What do you plan to do in FY 91 in these fields?

Dr. Judd: Within the NIMH Intramural Research Program the scientists will continue to expand their use of molecular biology and neurobiology for candidate gene isolation, linkage analysis of pedigrees having psychiatric and neurologic disorders (bipolar illness, schizophrenia, depression, violent behavior, obsessive compulsive, etc.), identification of chromosome mutations and biochemical mechanisms responsible for the clinical symptoms seen in affected individuals with nervous system disorders, and for the development of novel therapies based on recombinant DNA approaches.

For instance, the NIMH intramural scientists are beginning to use microdissection and cloning of mitotic chromosomes as a generalized strategy for the analysis of the genome in any organism having recognizable chromosome segments or bands. The genomic DNA fragments that we acquire from micro-dissection of chromosomes will reduce the complexity of genome analyses and form the foundation of a database that can be easily converted into landmarks, such as "sequence-tagged sites" to facilitate global mapping and sequencing of complex genomes.

Studies also involve the engineering of genetically altered cells that will be useful for transplantation strategies for the therapy of neurotransmitter deficiency states such as Parkinson's Disease. Using molecular genetic techniques, the IRP scientists are also developing animal models of neurologic and psychiatric disorders where currently there are no relevant animal models. These models will be particularly useful in studying the pathogenesis of disorders affecting humans and facilitate the development of novel therapies for the treatment of nervous system disorders such as Alzheimer's disease, bipolar illness, Gaucher's disease, Parkinson's disease, schizophrenia, and depression. It is crucial that animal models of these nervous system disorders be developed because the in vivo complexity of the nervous system cannot be accurately replicated with computers or tissue culture at this time.

The "Diagnostic Centers for Psychiatric Linkage Studies" cooperative agreement was funded late in 1989 and has undertaken the development of diagnostic instruments specifically modified to assess patients and relatives. This will be the basis for the evaluation of approximately 200 families affected with schizophrenia, over 200 families with mood disorders (bipolar), and approximately 300 families with Alzheimer's disease. The focus will be on the assessment of symptom profiles, demographics, course of illness, and other factors to allow diagnoses made according to multiple criteria. Cooperation and coordination with NIA (Alzheimer's disease research) and with the European Science Foundation (for schizophrenia and bipolar disorder research) are developing and show great promise. Such collaborations should allow for complementarity, interdigitation, rapid replication, and extension of findings in the future. In FY 1991, the Diagnostic Centers will actually collect blood samples and do clinical evaluation of patients and families for future genetic research on major disorders.

The "National Cell Repository" is projected to begin late in FY 1990 and continue for at least 5 years. This will be a cell bank including genetic material from all patients and family members studied in the "Diagnostic Centers for Psychiatric Linkage Studies" cooperative agreements, and eventually cell lines collected from research groups. These cell lines later will be made available to the research community to facilitate research on the genetic bases for these disorders.

PROFESSIONAL JUDGMENT BUDGETS FOR GENETICS AND NEUROBIOLOGY

Mr. Conte: What are your professional judgment budgets both the genetics and neurobiology programs?

Dr. Judd: Highlights of the FY 1991 professional judgement budget plans include several programs related to genetics totalling $3.0 million in FY 1991. National Pedigree Research Service (NPRS) is designed to compliment the other facets of the NIMH genetics initiative. The NPRS would support and coordinate the study of highly informative pedigrees with multiple affected members on a nationwide basis. Also in FY 1991 we will have ongoing collaborative meetings with ESF representatives to continue the process of maximizing comparability of the two large scale projects. The genetic analyses of these two samples will be greatly facilitated and may be a critical factor in identifying the gene or genes involved in these illnesses like schizophrenia, bipolar disorder and Alzheimer's disease, genetic research efforts and encourage further investigator-initiated research projects on this important topic.

Microdissection of Chromosomes

In collaboration with investigators in Melbourne, Florida, the NIMH intramural scientists are beginning to use microdissection and cloning of mitotic chromosomes as a generalized strategy for the analysis of the genome in any organism having recognizable chromosome segments or bands. The genomic DNA fragments that we acquire from micro-dissection of chromosomes will reduce the complexity of genome analyses and form the foundation of a database that can be easily converted into landmarks, such as "sequence-tagged sites" to facilitate global mapping and sequencing of complex genomes. This would require $2.0 million in FY 1991.

Genetic Linkage Studies

An understanding of the mechanistic consequences of mutations in proteins should provide better explanation for phenotypic variation in certain diseases affecting the human nervous system, as well as provide a more rational foundation for the diagnosis and formulation of therapeutic strategies. Linkage analysis studies of selected disorders affecting the nervous system, such as bipolar affective disorder in the Old Order Amish, are underway in an effort to identify the genes involved in these diseases. Intramural scientists are using genetic probes to map the human genome. As part of this work they are assembling a collection of cells from families with manic-depressive, schizophrenic, or other psychiatric-affected individuals. Systematic psychiatric assessments are being performed on each individual from whom cells are taken and cultured so that in the future genetic mutations might be correlated with clinical symptoms.

DNA probes are being collected and derived from a variety of sources. IRP scientists have recently begun using microdissected subgenomic DNA fragments from banded mitotic human chromosomes to generate probes and libraries that will be used to develop physical maps and high resolution genetic maps of selected high interest regions of the genome. Microdissection of chromosomal DNA provides the flexibility of rapidly targeting either large (such as whole chromosomes) or small (such as a chromosome band) subgenomic segments of chromosomes that may be identified to contain candidate genes for disorders affecting the human nervous system. In order to accomplish this in FY 1991 an additional $1.0 million would be needed to support staff costs ($250,000); supplies ($200,000); contracts ($350,000); and new equipment ($200,000).

FUNDING FOR MINORITY PROJECTS

Mr. Roybal: What has been the specific funding of minority projects (including MBRS and Minority Fellowship Program) for FY's 87, 88, 89, 90 and projected for FY 91?

Dr. Goodwin: The information follows:

Specific ADAMHA Minority Programs
(dollars in thousands)

	FY 87	FY 88	FY 89	FY 90	FY 91
MARC	$700	$800	$1,285	$1,148	$1,196
MBRS	900	1,100	1,349	761	420
MFP	1,000	1,100	2,773	2,787	2,020
MIRDP	0	0	0	1,100	1,100
Total	2,600	3,000	5,407	5,796	4,736

Key:

MARC: Minority Access to Research Careers
MBRS: Minority Biomedical Research Support
MFP: Minority Fellowship Program (including clinical training)
MIRDP: Minority Institution Research Development Program

NIMH MINORITY STAFFING PROFILE

Mr. Roybal: What is the current minority staffing profile at GS-12 and above, by grade, compared to pre-reorganization?

Dr. Judd: The information follows:

NIMH PROFILE

	Totals	Black	Hisp.	Asian P.I.	Am. Ind. Alask.	Non Min.	Other
1985 (Data as of 9-28-85)							
GS-12	61	9	2	0	1	49	
GS-13	63	3	1	1	0	58	
GS-14	75	5	1	2	0	67	
GS-15	75	7	0	3	0	65	
CC	62	2	0	0	1	59	
SES	22	1	1	1	0	19	
MALES							
GS-12	11	2	0	0	0	9	
GS-13	33	2	1	1	0	29	
GS-14	42	0	1	1	0	40	
GS-15	57	5	0	2	0	50	
CC	57	2	0	0	1	54	
SES	18	0	1	1	0	16	
FEMALES							
GS-12	50	7	2	0	1	40	
GS-13	30	1	0	0	0	29	
GS-14	33	5	0	1	0	27	
GS-15	18	2	0	1	0	15	
CC	5	0	0	0	0	5	
SES	4	1	0	0	0	3	
1990 (Data as of 1-27-90)							
GS-12	80	7	0	3	1	69	
GS-13	64	3	1	1	0	59	
GS-14	79	4	0	2	0	72	1
GS-15	56	4	1	3	0	48	
CC	107	16	3	3	0	85	
SES	18	1	1	0	0	16	
MALES							
GS-12	22	2	0	0	1	19	
GS-13	31	2	1	1	0	27	
GS-14	40	0	0	2	0	38	
GS-15	39	3	1	1	0	34	
CC	75	6	1	1	0	67	
SES	15	0	1	0	0	14	
FEMALES							
GS-12	58	5	0	3	0	50	
GS-13	33	1	0	0	0	32	
GS-14	39	4	0	0	0	34	1
GS-15	17	1	0	2	0	14	
CC	32	10	2	2	0	18	
SES	3	1	0	0	0	2	
NET CHANGES 1985 - 1990							
GS-12	19	-2	-2	3	0	20	
GS-13	1	0	0	0	0	1	
GS-14	4	-1	-1	0	0	5	1
GS-15	-19	3	1	0	0	-17	
CC	45	14	3	3	-1	26	
SES	-4	0	0	-1	0	-3	

Mr. Roybal: Since the reorganization, what is the number of new hires at GS-12 and above, by grade, compared with minority hires? Please separate by social and ethnic background.

Dr. Judd: The information follows:

External Opportunities
National Institute of Mental Health

1985 - 1989

	Total	Minorities	
1985			
GS 9 - 12	6	0	(EARLY DATA IS ONLY AVAILABLE IN THE GRADE BANDS SHOWN)
GS 13 - 15	1	0	
SES	0	0	
CC	0	0	
1986			
GS 9 - 12	5	0	
GS 13 - 15	1	0	
SES	0	0	
CC	0	0	
1987			
GS 9 - 12	9	1	Black Female
GS 13 - 15	4	0	
SES	0	0	
CC	0	0	
1988			
GS 9 - 12	8	2	Black Females
GS 13 - 15	2	0	
SES	1	0	
CC	0	0	
1989			
GS 9 - 12	12	2 1 1	Black Females Male American Indian Asian Female
GS 13 - 15	3	0	
SES	0	0	
CC	0	0	

The data only reflects hires from outside DHHS and does not reflect hires from other agencies within DHHS. Many ADAMHA hires are from within DHHS and are not reflected by this data.

NIMH SENIOR MINORITY STAFF

Mr. Roybal: What is the number, by grade, of senior minority staff holding policy decision positions compared to the pre-organization?

Dr. Judd: In June 1985, prior to the reorganization of NIMH, senior minority staff holding decision positions numbered eight. In March 1990, senior minority staff numbered six, for a net decrease of two. The breakout by grade follows:

SENIOR MINORITY STAFF IN POLICY DECISION POSITIONS
NIMH HEADQUARTERS

1985	Black	Hisp.	Asian	Am.Ind.	Total	Change
GS-14	0	0	1	0	1	---
GS-15	4	1	0	0	5	---
CC	1	0	0	1	2	---
SES	0	0	0	0	0	---
1990						
GS-14	0	0	0	0	0	-1
GS-15	3	0	1	0	4	-1
CC	0	0	0	0	0	-2
SES	1	1	0	0	2	2

Mr. Roybal: What is the number, by grade, of minority staff assigned line authority positions at the section, branch and division levels?

Dr. Goodwin: Currently, at NIMH Headquarters, there is one minority GM-15 at the division level and two minority GM-15s at the branch level.

MINORITY MEMBERS OF THE NATIONAL ADVISORY MENTAL HEALTH COUNCIL

Mr. Roybal: Who are the current Black and Hispanic members of the National Advisory Mental Health Council?

Dr. Judd: The National Advisory Mental Health Council is comprised of 12 appointed members; there is one vacancy due to a resignation. Of the 11 current members, 5 are female, 6 are male. There are 2 Black males (Felton J. Earls, M.D. and James S. Jackson, Ph.D.) There are no Black female members nor are there any Hispanic members.

Mr. Roybal: How many Black and Hispanic members were appointed to fill the five vacancies which occurred in 1987 and each year subsequently?

Dr. Judd: In September 1987, 5 vacancies occurred on the National Advisory Mental Health Council. All retiring members that year were white--3 females, 2 males. There was subsequently the resignation of a white male. In order to balance the rotation, three new members were appointed for 4-year terms (1987-1991); they were two White females and one Black male. In addition three members were appointed for 2-year terms (1987-1989); they were two White males and one White female. In 1988, terms of 3 members expired; 1 White male, 1 White female, and 1 Asian male. For the 4-year terms 1988-1992, 1 White male, 1 White female and 1 Black male were appointed. In 1989, 3 members retired, as noted above; 2 white males and 1 white female were appointed. For terms starting September 1990, there will be 4 vacancies to fill; nominations are currently being prepared for submission to the Office of the Secretary. Particular attention will be paid to Hispanic and Asian candidates, given the present makeup of the Council.

NIMH MINORITY RESEARCH AND RESEARCH TRAINING

Mr. Roybal: What is the status of minority research and research training at NIMH since the reorganization?

Dr. Judd: Minority research training has been substantially increased over the past two years, even though the overall research training budget has been essentially constant and we have had to raise trainee stipends in all of the programs. We have increased the number of Minority Fellowship Programs to six, a new research MFP in Psychiatry was begun this year, and the total funding of the MFPs was increased from $1.2 million to $1.6 million in FY 1989. Estimated funding for FY 1990 is $1.8 million.

In addition we funded three new Minority Access to Research Careers (MARC) Honors Undergraduate Programs in FY 1989 focusing on training American Indians, Native Hawaiians, and Hispanics, at the University of New Mexico, University of Hawaii, and the University of Puerto Rico. The total NIMH funding of the MARC Honors Undergraduate Program has increased from $.6 million in FY 1988 to $1 million in FY 1989, and estimated funding for FY 1990 of $1 million. In FY 1989, we also funded two MARC Faculty Fellows for additional postdoctoral research training.

We have also expanded our short term training of minority undergraduate students by funding a new program at the University of California-San Francisco that provides a research intensive experience to 25 minority students from all over the United States in the areas of neuroscience, psychology, and mental health services research. We are also continue to support short term summer training in Psychology at the University of Delaware.

To assist minority researchers develop successful research grant applications, a series of regional workshops have been held as well as an intensive technical assistance workshop. Persons who have successfully completed the first 2 of the 3 phases are being provided extensive mentoring by experts in their area of research over an 18 month period to help them develop their research with the goal of their being able to submit a successful research grant application.

A new Minority Institutions Research Development Program (MIRDP) was announced last April to help minority institutions to 1) develop their institutional and faculty research capacity, 2) fund individual research projects, and 3) support students as research assistants. This program was developed after an evaluation of NIMH supported MBRS research projects, and consultation with an advisory committee concerning the recommendations from the evaluation. Thirteen institutions have submitted applications which are being reviewed.

A new Minority Research Centers announcement was issued to support additional centers and 9 applications are currently being reviewed. At present, NIMH is supporting 4 Minority Research Centers--Fordham University (Hispanic), University of California (Asian American), University of Texas (Hispanic and Black), and University of Colorado (American Indian).

A new announcement of Supplements for Underrepresented Minorities in Biomedical and Behavioral Research was issued by ADAMHA that will provide support for undergraduates, graduate students, and postgraduate minorities to work with regular research grantees of ADAMHA. This program will enable minority persons to become involved in research with persons who have funded grants from NIMH and represents a very significant additional opportunity. We expect to fund a number of supplements this year.

As requested by Congress, new announcements are being developed for research concerning American Indians.

ADAMHA VACANCIES AT GS-13 AND ABOVE

Mr. Roybal: Indicate the current vacancies grades 13 to SES and indicate if you will recruit minorities for these positions.

Dr. Goodwin: We have 82 vacancies altogether with 33 in NIMH.

Vacancy announcements receive extensive distribution including the Affirmative Action Register, mailing copies of announcements and letters soliciting candidates from institutions and organizations with strong minority populations, and paid advertisements in professional scientific journals and minority-oriented publications for positions that are particularly difficult to fill. ADAMHA also participates in U.S. Office of Personnel Management Health, Science and Technology job fairs which receive substantive local and national publicity. Internal merit promotion announcements identify occupations for which Federal Equal Opportunity targeted recruitment is of priority.

MINORITY STAFFING IN AIDS AND HOMELESS PROGRAMS

Mr. Roybal: In the AIDS and Homeless programs indicate the staff assigned to the programs (not already in other units) and indicate black and Hispanic status. Also, please indicate the number of grantees and Principal Investigators within that number who are black or Hispanic and participating in the AIDS and Homeless programs.

NIMH

The Office of Programs for the Homeless Mentally Ill, National Institute of Mental Health does not currently employ any minority individuals. At present, the Office has only 2 permanent, full-time employees; a GS-15 Office Director and a GS-9 social science analyst. The Office uses a number of ad-hoc advisory groups and consultants to supplement its staff and to provide expertise on a range of issues pertaining to the homeless mentally ill population.

On a regular basis, the Office coordinates and consults with other NIMH staff who are knowledgeable on the special needs of minority persons who are homeless and mentally ill. Specifically, the Office works closely with Delores Parron, Ph.D., Associate Director for Special Populations and H. Alice Lowery, Chief, Psychosocial Treatments and Rehabilitation Program, Schizophrenia Research Branch.

Four minorities assist the Office, in an advisory capacity, with the implementation of the National Evaluation of the McKinney Demonstration Projects for Homeless Adults with Mental Illness. They are: Joyce Rayzor, White House Fellow, Department of Housing and Urban Development; James Jones, Ph.D., American Psychological Association; Norweeta Milburn, Ph.D., Howard University; and Delores Parron, Ph.D., Associate Director for Special Populations, NIMH.

The Office utilizes, as consultants, two senior minority professionals who are prominent in the areas of research and mental health services pertaining to homelessness and mental illness among minority persons; Norweeta Milburn, Ph.D. of Howard University and Marsha Martin, D.S.W. of Hunter College, School of Social Work. Additionally, the Office insures that all review committees responsible for the review and approval of homeless grant applications have representation that includes minority reviews sensitive to the needs of homeless mentally ill minority persons.

Under the McKinney Community Mental Health Services Demonstration Projects for Homeless Individuals who [illegible] Chronically Mentally Ill (Section 612), NIMH supports twelve demonstration projects that implement and evaluate comprehensive community-based services for homeless adults with severe, long-term mental illness and that test innovative, targeted approaches to serving severely emotionally disturbed homeless children and adolescents. At present, five of these grants (Florida, Illinois, New York, Virginia, District of Columbia) have minority Principal Investigators.

Ten research and research demonstration projects were funded in FY 1989 under a new ongoing program announcement entitled, "Research and Research Demonstrations on Homeless Severely Mentally Ill Adults and Homeless Families with Children Who Are At Risk of Severe

Emotional Disturbance". None of these grants have minority Principal Investigators.

Recognizing the lack of minority persons involved in research on homelessness and its relationship to mental illness, the Office of Programs for the Homeless Mentally Ill will co-sponsor a Minority Research Development Meeting on Homelessness and Mental Illness with the Minority Research Resource Branch of the Division of Biometry and Applied Science. The purpose of this meeting is to encourage and assist minority investigator-initiated research on the homeless mentally ill population. In addition, this meeting will focus on research on minority homeless mentally ill persons. The meeting is scheduled for the summer of 1990.

Currently, there are no minority staff in the NIMH AIDS Program. The NIMH AIDS program is engaged in a series of efforts to increase the number of successful applications submitted by minority investigators. A research seminar/workshop is being developed to provide technical assistance to minority investigators to develop research applications related to HIV infection and AIDS. Approximately 50 promising minority investigators in the early phase of their careers have expressed initial interest in this program, which will consist of a 3-1/2 day seminar and follow-up consultation. The goal is to add 5-7 new awards with minority principal investigators in FY 1991.

NIDA

In its AIDS program, NIDA has 12 Blacks and 1 Hispanic employee.

NIAAA

Staffing for Special Programs

	Total	Blacks	Hispanics
AIDS	14	0	0
HOMELESS	8	0	0

As far as we know, none of our NIAAA principle investigators conducting extramural AIDS or Homeless research are Black or Hispanic.

MINORITY COMMUNITY PARTICIPATION IN NIMH PROGRAMS

Mr. Roybal: Describe in specific terms the efforts which have been undertaken to increase minority community participation in NIMH programs.

Dr. Judd: There are many ways in which we have tried to do this. One example is in the development of our new Minority Institutions Research Development Program (MIRDP). We began with an evaluation of our existing NIMH supported Minority Biomedical Research Support (MBRS) grants and the recommendations that were made on the basis of the evaluation to strengthen our support of research in minority institutions. The recommendation that NIMH develop its own version of the MBRS program in order to increase communication concerning NIMH areas of research and to be more responsive to minority investigators needs was presented to an advisory committee of MBRS grantees and other minority researchers. They strongly endorsed NIMH creating its own "MBRS" type program and that we also add a new element to aid minority institutions develop their institutional and faculty capacity to do research in mental health. The MIRDP was developed out of those discussions and 13 applications are currently being reviewed.

The program of Supplements for Underrepresented Minorities in Biomedical and Behavioral Research came out of a similar set of interactions with minority persons interested in research.

A series of research workshops in mental health services research have focused on mental health problems of minority persons and have provided technical assistance to minority persons by experienced minority mental health researchers such as Gloria Canino, Ronald Angel, Spero Manson, and others.

RECRUITING WOMEN AND MINORITY STAFF IN ADAMHA

Mr. Roybal: For the past 5 years, we have asked you to provide data on the number of women and minority members on ADAMHA's staff at SES level to junior programming officers. How would you evaluate the success of these efforts and what specific steps will you take to improve and enhance this situation?

Dr. Goodwin: From 1985 to January 1990 the agency has grown from 1,314 to 1,608 employees. We are pleased that members of minority groups and women have been able to take advantage of this growth.

Women in the Professional category have increased at nearly five times the rate shown for men in that category, and at nearly twice the rate for men in the Administrative category. Hispanics, Asians, and American Indians nearly doubled their number in the Professional category. Major gains are visible among Commissioned Corps Officers for both minorities and women: The number of Black Corps Officers increased from 2 to 18; of Hispanics, from 0 to 5; of Asians, from 0 to 6; and of American Indians, from 0 to 1. The number of women Corps Officers increased from 12 to 46 with marked gains among Blacks, Hispanics, and Asians, who had previously not been represented at all in the Commissioned Corps.

Our efforts to employ and advance minority members and women have resulted in the elimination of severe under- representation of Hispanic females and American Indian males at the Professional GS 9-12 level, Hispanic females at the Professional GS 13-15 level, and Asian females at the Administrative GS 9-12 level.

As women and minorities move up through the Professional and Administrative series in greater numbers, we expect to see their greater representation at the SES level as well in the near future.

The agency has a Department-approved Affirmative Employment Plan covering the years 1988 to 1992. A plan covering NIMH alone is also in force. The plans are closely monitored by the ADAMHA Women's Council and by the Office of Equal Employment Opportunity, which provides progress reports to Institute Directors on a quarterly basis and yearly progress reports to PHS, DHHS, and EEOC. Our ultimate goal is to eliminate underrepresentation of minorities and women at all levels in ADAMHA.

COORDINATION OF DRUG RESEARCH INITIATIVES WITH LOCAL PROGRAMS

Mr. Roybal: Have any research initiatives been developed which would aid both community based and city-wide programs in the war against drugs?

Dr. Schuster: In recent years the Institute has undertaken a national demonstration research effort to implement and evaluate different outreach, AIDS education, and behavioral change intervention methods targeted to intravenous drug abusers and their sexual partners in the community setting. Additional projects were subsequently funded through this program with greater emphasis on reaching pregnant women and their partners, prostitutes, and runaway or homeless youth who are intravenous drug abusers or sexual partners of intravenous drug abusers.

Two new major initiatives are being launched to directly support community-wide and city-wide programs. The first of these is a demonstration research program on service delivery in non-traditional settings. The purpose of this grants program is to understand social support systems available to drug using populations; and to limit the spread of HIV.

The second new initiative is a cooperative agreement program for AIDS community-based outreach/intervention research. This program builds on the earlier efforts of NIDA's Community Outreach Research Demonstration Program. It will permit both new initiatives and the refinement of earlier outreach and intervention research strategies. The purpose of the program is to evaluate the efficacy of community-based intervention strategies designed to prevent and reduce the spread of AIDS among intravenous drug users, their sexual partners, and those at demonstrable risk for intravenous drug use.

Also NIDA's treatment research demonstration initiative provides support for expanding treatment capacity and improving its effectiveness in community-based programs, including multi-site programs which serve different areas of the same city. These programs are tied into outreach and public awareness programs designed to aid in prevention and treatment activities.

Research that will have immediate application in the workplace components of community and city-wide programs are underway. These grants develop employee education materials and supervisory training materials, to investigate the relative effectiveness of techniques for training supervisors, and to evaluate and improve EAP screening and referral techniques. Several grant and contract studies are examining the relationships between drug use and indicators of job performance. These studies will provide communities and cities with a strong research base upon which to identify needs and build comprehensive programs.

In addition, NIDA's services research component has funded the Center for Drug Abuse Services Research at Brandeis University which is currently developing theoretical and methodological approaches to enhance drug-related services research in areas of, for example, cost benefit and cost effectiveness, drug abuse treatment capacity, assessment of market forces and public policies in the service system, service utilization and cost among pregnant women and infants, and employee assistance programs.

NIDA is currently funding a national Drug Services Research Survey of drug abuse service providers and clients in treatment. The survey will generate data on provider staffing patterns, costs, waiting lists, H.I.V. and drug testing; as well as information on client drug history, services received, time in treatment, and discharge status. The survey will reach 1,000 facilities nationwide.

ANTI-DRUG INITIATIVES IN LATIN AMERICA AND THE CARIBBEAN

Mr. Roybal: The war on drugs, particularly the supply dimension, has generally focused attention on our Latin American neighbors and the Caribbean. What specific initiatives has ADAMHA developed to coordinate work in Latin America and the Caribbean in the war on drugs?

Dr. Goodwin: The U.S. Information Agency (USIA) is about to complete a procurement to provide comprehensive prevention and public awareness programs in South America and the Caribbean. NIDA has been asked to enter into a Memorandum of Agreement with AID to oversee the technical components of AID initiatives as they relate to prevention and epidemiological research.

NIDA has served on the USIA's Hubert H. Humphrey Fellowship Program Advisory Committee since its inception. NIDA arranges for placement of Hubert H. Humphrey fellows in locations of scientific excellence that are being funded by NIDA. Beginning in fiscal year of 1990, NIDA will contribute funds to USIA through an Inner-Agency Agreement to support selected Hubert Humphrey fellows who have specific interest in drug abuse research.

NIAAA has a no-cost agreement with the Mexican Institute of Psychiatry for bilateral cooperation on alcohol related problems that includes scientist exchanges and joint research collaboration.

INFORMATION AND TECHNOLOGY EXCHANGE

Mr. Roybal: Are there any plans or programs to exchange information and technology?

Dr. Goodwin: ADAMHA has S&T health agreements with the Soviet Union, Peoples Republic of China, Israel, India, Egypt, Japan, Mexico and other countries to exchange information and research technology.

For example, ADAMHA is involved in bilateral health cooperation in Mexico through OSAP/NIDA contract with PAHO to conduct a field inquiry of epidemiological, treatment, and prevention needs along the South West Border (which is 2,000 miles in length), formed by ten states on the Mexican side and four states on the U.S. side (California, Arizona, New Mexico and Texas). The report has been completed and will be presented at the 48th annual meeting of the U.S. Mexico Border Health Association in Saltillo, Mexico, June 3-6, 1990.

Also, OSAP in cooperation with State Department's Bureau of International Narcotics Matters, is currently reviewing international activities to ensure continued support in the most cost effective, cost beneficial manner.

ADAMHA has also supported a number of bi-lateral efforts with the U.S.-Mexico Border Health Association including providing a contract in affiliation with PAHO to conduct a field inquiry of epidemiological and prevention needs along the South-West border (which is 2,000 miles in length), formed by ten states on the Mexican side and four states on the U.S. side (California, Arizona, New Mexico and Texas). The report has been completed and will be presented at the 48th annual meeting of the U.S. Mexico Border Health Association in Saltillo, Mexico, June 3-6, 1990.

In addition, the National Institute on Drug Abuse (NIDA) has worked closely with the PAHO, the Organization of American States (OAS), the State Department's Bureau of International Narcotics Matters, the U.S. Information Agency (USIA), and the U.S. Agency for International Development in providing a multitude of technical exchanges with drug abuse workers and scientists throughout the region; specifically NIDA was called upon to provide the technical oversight to three major epidemiological surveys conducted in Jamaica. We have also participated in drug abuse conferences in Barbados, Trinidad and Belise. We were called to provide technical assistance by the governments of Guiana, Trinidad/Tobago, Brazil, Columbia and Peru. NIDA's scientists and grantees have been asked to work in the countries of Ecuador, Peru, Bolivia and Brazil in promoting standardized epidemiological procedures in national surveys.

Mr. Roybal: ADAMHA has three international offices: How do these offices' efforts compare to other institutes programs, i.e. the Fogarty International Center for NIH and CDC's office of International Health?

Dr. Goodwin: NIDA, NIMH, and NIAAA each coordinate international research activities that involve foreign grants/contracts, bilateral exchanges of scientists, joint workshops/conferences, and collaborative research activities. In comparison with the Fogarty International Center, ADAMHA international offices are smaller and more limited in their functions (i.e., they are not set up to provide technical assistance services or infrastructure support and training abroad).

In relation to staffing, the NIMH and NIAAA offices for international affairs are manned by one professional staff person and one secretary. NIDA, which has a significant function in relation to the World Health Organization (WHO) involving drug scheduling and international drug assessment review and advisory functions, has three professional staff.

ADAMHA has no staff stationed abroad in comparison with CDC which has field stations including staff at WHO and other centers. CDC conducts international surveillance of diseases and epidemiology training and provides technical assistance to foreign health officials.

ADAMHA's international activity programs are integrated within the respective institute's program and budget structure; they have no separate budget. In comparison, the Fogarty International Center has its own budget and serves as the operating and coordinating international arm of all the NIH institutes. It also provides liaison functions for the application, review, and placement of foreign visiting scientists who are carrying out collaborative research in NIH and ADAMHA intramural research laboratories.

In summary, ADAMHA international activities are focused on the implementation of Science and Technology health cooperation agreements with countries concerned with ADM issues, of exchange of information and scientists, development of joint conferences and workshops to review the state of the art in ADM areas, and the development and conduct of collaborative research activities in priority areas of mutual interest and benefit.

COORDINATING WITH FEDERAL, STATE, AND LOCAL ANTI-DRUG PROGRAMS

Mr. Roybal: What is ADAMHA doing to coordinate efforts with Federal, State, local and academic communities to develop a more cohesive battle against substance abuse?

Dr. Goodwin: Throughout ADAMHA there are many initiatives which promote a coordinated effort in the war against drugs.

By co-sponsoring data collection projects with other Federal agencies, NIDA has greatly increased the information available for the measurement of the nature and extent of drug use. Many national surveys have been conducted in coordination with other federal agencies. These included; the Office of Health Prevention and Disease Prevention, the Centers for Disease Control (CDC), the National Center for Health Statistics (NCHS), and the Department of Labor

(DOL). Current plans include continued support for the National Longitudinal Survey of Youth, support for the 1990 Longitudinal Followup to the National Maternal and Infant Health Survey, and sponsorship of a drug abuse supplement on the 1991 National Health Interview Survey (with NCHS). Additionally, NIDA assumed leadership for development of the drug abuse module for the CDC Youth Behavioral Risk Study to be conducted annually in a national probability sample of students in grades 9 through 12 beginning in 1990, and to be used in State-level surveys on a voluntary basis. NIDA will also explore the appropriateness of proposing drug questions for the 1992 Mortality Followback Survey (with NCHS). NIDA also works with the National Association of State Alcohol and Drug Abuse Directors and other groups in the development of drug abuse policy.

As the Federal focus for the Administration's substance abuse prevention efforts, the Office for Substance Abuse Prevention has established cooperative working relationships with many Federal agencies and State organizations in its efforts to develop a comprehensive and cohesive national prevention program. An example of this effort is OSAP's participation in the Federal Ad Hoc Interdepartmental Task Force. Chaired by the Director of OSAP, the Task Force is comprised of representatives from the Departments of Education, Justice, Housing and Urban Development, Labor and Transportation. The purpose of the Task Force is to assist several communities develop ways to better coordinate the delivery of multiple Federal agency resources. The project is intended to demonstrate how existing Federal resources can be more effectively utilized, or redirected, to provide a more comprehensive response to the needs of the community.

OSAP also works with the Department of Agricultures's Supplemental Food Program for Women, Infants, and Children (WIC) in order to provide alcohol and drug education and prevention services to low income women participating in the WIC program.

ADAMHA's new Office for Treatment Improvement (OTI) has undertaken several initiatives intended to foster better coordination of drug treatment efforts at all levels of government and with academic communities.

At the federal level OTI is: exploring funding and drug treatment service linkages between ADAMHA and the Head Start Program; determining more effective utilization of other sources of funding for drug treatment, such as Medicare and Medicaid; collaborating with the Department of Justice in the development and strengthening of substance abuse treatment within the criminal justice system.

ADAMHA cosponsored three regional conferences in 1989, with the Departments of Education and Justice. At these conferences, State administrators discussed means for better coordination of Federally-financed services at the State level. As a result of the regional conferences, a number of States have established on-going coordination across State agencies in the planning and funding of substance abuse activities.

Another ADAMHA initiative to promote cross-agency coordination at the State level involves a three year effort to improve State management of the Alcohol, Drug Abuse and Mental Health Services (ADMS) Block Grant Program. ADAMHA is establishing a voluntary program of State substance abuse service planning with the first submissions to the Federal Government anticipated this Fall. State planning efforts will focus on strengthening substance abuse service coordination with other services financed by the State, including medical, vocational, educational, housing and social services. OTI will conduct management reviews in a number of States during FY 1990 and FY 1991 to help States identify and close service-coordination gaps among State services and to promote service coordination at the substance abuse treatment provider level.

Through its discretionary grant programs, OTI is also promoting coordination of services to improve drug treatment. Three of OTI's grant programs--the target cities, special populations and criminal justice/community service interface initiatives--require coordination between substance abuse treatment services and other services provided at the local level, with particular emphasis on medical and vocational services being made available to patients in drug abuse treatment.

OTI will focus its technical assistance activities on service coordination. Specifically, OTI is developing guidelines concerning the provision of comprehensive drug abuse treatment services for use by State and local treatment programs. These guidelines will specify a full range of services that comprise a comprehensive treatment approach for substance abuse.

OTI will convene a national conference on service coordination for State authorities in early 1991 and, as part of that effort, will publish a "how to" manual on service coordination prior to the national conference.

OTI is working to strengthen linkages between the primary health care system and substance abuse providers. Specifically, OTI intends to broaden the focus of primary health care providers and their capacity to diagnose, treat, or refer patients with substance abuse problems. Efforts will be made to expand medical education attention to substance abuse, promote in-service training of health professionals, and continue to establish formal linkages between community health care centers and substance abuse treatment providers at the local level.

COORDINATING NIMH SCIENTIFIC ACTIVITIES WITH OTHER FEDERAL AGENCIES

Mr. Roybal: What steps have been taken to ensure coordination of ADAMHA's scientific activities related to elderly mental health with NIMH and NIH Institutes and with other governmental agencies which are doing related research, such as AOA, and the Veterans Administration?

Dr. Judd: The NIMH staff work closely and collaboratively with the staff of the National Institute on Aging (NIA), the Department of

Veteran's Affairs, and other governmental agencies to ensure the coordination of ADAMHA's scientific activities related to elderly mental health. There are many examples of formal collaboration such as a Memorandum of Understanding between NIMH and AOA; participation by NIMH and all appropriate agencies on the Interagency Committee for Research on Aging; the issuance of a joint research grant announcement between NIMH, NIA, the National Center for Nursing Research and the National Center for Health Services Research; and participation on the DHHS Council on Alzheimer's Disease. The NIMH also co-sponsors numerous scientific conferences with other agencies such as the Consensus Conference on Sleep Research with NIA and a major conference on Aging and Mental Health in the 1990s which was jointly sponsored by the NIMH, NIA, and the AOA. In addition, there are many less formal coordinating activities which take place between the professional staff of these agencies including informal information sharing, joint presentations at meetings, and invitations to attend workshops and conferences.

OTI has scheduled a series of technical assistance workshops for recipients of the Target Cities Grants. The workshops will be designed to incorporate the collaboration of the local colleges and universities in supporting the service delivery of the Target Cities Drug Treatment Programs. This support may be in the form of social work schools providing internship in the treatment programs, training of drug abuse staff, and joint college and program substance abuse prevention activities on campus and in the community. In addition, the National Association of State Alcohol and Drug Abuse Directors and the United States Conference of Mayors will participate in these workshops.

OTI staff also work with various professional organizations and associations such as the National Association of Social Workers, the American Corrections Association, the American Psychological Association, the American Medical Association, the National Coalition for Homeless, NASADAD, the National Association of Resident Management Corporation (Public housing), etc. OTI also sponsors national conferences on critical issues; i.e., an adolescent treatment conference on adolescents who have co-occurring problems of mental illness and substance abuse and a conference on finding solutions to the homeless problem.

ADAMHA MINORITY GRANTS AND PRINCIPLE INVESTIGATORS

Mr. Roybal: For the past 5 years, we have asked you to provide data on the number of minority grants and the number of minority Principal Investigators. How would you measure each of the institute's and OSAP's efforts to improve and enhance this situation?

Dr. Goodwin: ADAMHA has established criteria for determining minority relevance. These criteria include:

Major Relevance

1. One hundred percent of the subject population is one of the four U.S. ethnic/racial groups (Blacks, Native Americans and Alaska Natives, Asian/Pacific Islanders, Hispanics)
2. The main purpose is to study one or more of the four U.S. ethnic/racial groups.
3. The purpose of the project is to conduct a research conference or prepare a book on one or more of the U.S. ethnic/racial groups.

Partial Relevance

1. Studies of one or more of the four U.S. racial/ethnic groups undertaken as part of a larger project.
2. The investigator states that race/ethnicity is used as a variable in testing major hypotheses of the study and will be included in the analysis.
3. A study that oversamples one or more of the four U.S. ethnic/racial groups.

Efforts to increase the number of minority grants have resulted in rising numbers. For example, NIMH funding demonstrates a positive trend:

FY	Grants of Major or Partial Relevance	Funding
1985	85	$14.6 M
1986	82	16.9
1987	110	26.3
1988	121	35.6
1989	165	50.1

In 1987 ADAMHA implemented policy on inclusions of minorities and women in study populations by including in all relevant program announcements, requests for applications, and requests for proposals. For example, applicants are urged to give added attention (where feasible and appropriate) to the inclusion of minorities in study populations for research into the etiology of diseases, research in behavioral and social sciences, clinical studies of treatment and treatment outcomes, research on the dynamics of health care and its impact on disease, and appropriate interventions for disease prevention and health promotion. If minorities are not included in a given study, a clear rationale for their exclusion should be provided. Investigators are reminded that merely including arbitrary numbers of females and/or minority group participants in a given application is insufficient to guarantee generalization of the study results.

In FY 1986, NIDA spent $3.1 million in support of minority principal investigators, $4.4 million in FY 1987, $2.8 million in FY 1988, $2.4 million in FY 1989 and estimates $3.1 million for FY 1990. The increase from 1989 to 1990 is nearly 30 percent. Research related to minority populations has risen dramatically by year from FY 1986 to FY 1989; $4.7 million, to $25 million, to $28.5 million, to $31.6 million, to $36 million. The budget for training of minority persons has increased threefold in the past three years.

The NIDA's Special Population Research Programs are committed to increasing the participation of underrepresented scholars who are interested in examining issues of importance to the understanding of addiction and drug abuse; and to the development of improved methods for assessment, prevention, and treatment of these problems. Program activities consist of a number of interrelated elements organized to improve the probability that proposals submitted by these scholars will be approved and receive a meritorious priority score.

A major activity is the planning, implementation and evaluation of the Research Development Seminar Series. The series is organized and presented to underrepresented scholars to provide them with a fundamental understanding of the language and process of drug abuse research. Emphasis is placed on developing and understanding drug abuse science and research methodology. The seminar content focuses on theory based research proposals employing empirical methods. Seminars also include a review of NIDA's research grants and contracts process from preproposal through submission and review to award. Seminars are designed to meet a series of needs facilitating the development of competitive research skills. NIDA staff work with the participants in selecting training faculty and designing the scope of work to be covered during a seminar.

Eight supplemental requests have been submitted by NIDA grantees to support new minority scholars. One received funding in FY 1989, one is currently recommended for funding, and the remaining applications are currently under review.

NIDA has expanded its support for the Minority Access to Research Careers Programs and the Minority Institutions Development Program. In addition a contract has been awarded to examine drug abuse research issues among the HBCU community and barriers to research careers among HBCU staff.

NIDA has developed special grants writing training workshops for black and other minority scientists who want to conduct epidemiological and other research on drug use. NIDA recognizes the contribution that minority scientists can make to the drug abuse field and actively seeks grant and training applications from qualified individuals.

The Office for Substance Abuse prevention has actively sought to increase minority participation in its programs. Over 50 percent of its grants contracts have been awarded to ethnic minority groups. In addition, staff composition of these grant programs usually mirrors the communities served.

To the extent possible, OSAP provides technical and capacity building support to ensure that OSAP grantees and other minority organizations have requisite organizational and business skills necessary to secure funds, conduct sound prevention programs, evaluate the reliability of these programs, publish results, and accomplish other tasks required to advance the state of knowledge of prevention in general and, in particular, of prevention within minority populations.

NEW EFFORTS TO INCREASE MINORITY CLINICIANS AND RESEARCHERS

Mr. Roybal: Are there any new mechanisms or programming efforts to increase the number of minority clinicians and researchers that we will need and what will it cost?

Dr. Goodwin: In April 1989 the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) issued a program announcement entitled Minority Institutions Research Development Program (MIRDP). This program will assist minority institutions in augmenting and strengthening their research infrastructure in order to facilitate and foster the development of alcchol, drug abuse and mental health (ADM) research projects. The program will also support research development activities for faculty interested in conducting ADM research. Minority students will benefit from participation in research projects as research assistants and will be encouraged to pursue careers in ADM research and will cost $1 million in 1990.

In February 1990 ADAMHA issued Guidelines for Supplements for Underrepresented Minorities in Biomedical and Behavior Research Supported by ADAMHA. The aim of these programs is to attract and encourage underrepresented minority faculty and students to pursue biomedical and behavioral research careers in areas within the missions of all the awarding components of ADAMHA by providing supplemental funds to ongoing research grants. The ADAMHA anticipates that by providing these scientific opportunities at specific points in the research career development of minorities, it will substantially increase numbers of minorities in biomedical and behavioral research holding ADAMHA grants and will cost $500,000 in 1990.

To assist minority researchers in developing successful research grant applications, a series of regional workshops have been held as well as an intensive technical assistance seminar/workshops. Those persons who have successfully completed two of the three phases are being provided extensive mentoring by experts in their area of research over an 18 month period to help them develop their research with the goal of their being able to submit a successful research grant application. These research seminar/workshops have been targeted to the mental health services research and AIDS research programs and will cost $250,000.

During FY 1990, the Office for Substance Abuse Prevention initiated (under its National Training System) a $10 million effort to increase the number of new substance abuse counselors as well as enhance the skills of those counselors currently working in the field. This program will have the effect of increasing both the number of minority substance abuse counselors or those working in minority programs.

Provision for the training of minority drug abuse treatment staff will be of special concern to OTI in its critical population grant initiative. Under this initiative, OTI will fund three year drug treatment demonstration programs for critical populations, which include racial/ethnic minorities, persons in public housing, and adolescents. These grants will enhance existing drug treatment programs and treatment systems. One of the fundable program components includes staff training. Additional clinical internships in drug treatment programs for medical students and other clinical staff are being considered by OTI.

NIAAA is sponsoring several programs to increase the number of minority scientists conducting research on ADM disorders. The "Minority Scholars Program," which is unique to NIAAA, supports scientists for the purpose of conducting research on minority health issues and to develop minority research capacity by stimulating research interest in problems germane to specific minority populations. Minority scholars also serve as resource scientists with expertise in various issues dealing with minorities and alcohol.

Another new program, "Research Supplements for Underrepresented Minorities in Biomedical and Behavioral Research" was established to expand minority scientists" knowledge of alcohol and other drug abuse problems, to increase their commitment to examining the problems of addiction and alcohol use among minority populations and to provide research experience. The recently established "Minority High School Apprenticeship Program" will attract minority students to research careers by giving them an opportunity to participate in ADM research with experienced NIAAA grantees. The 1991 NIAAA request includes $1 million for all special grant programs targeted to minorities. Funding for the programs mentioned here would be approximately $.7 million.

MENTAL HEALTH NEEDS OF THE ELDERLY

Mr. Roybal: Given that most experts feel the elderly are still underserved, what federal actions will the Administration take this year to adequately meet the mental health needs of our elderly population?

Dr. Judd: Research for the mental disorders of the elderly represents a significant priority for the Institute. The proposed budget is approximately $42 million for FY 1991. NIMH research in this area encompasses studies of depressive and psychotic disorders that begin in the older years, as well as chronic psychiatric disorders. Special attention is being given to Alzheimer's disease with areas of investigation including: diagnosis of Alzheimer's disease, treatment of Alzheimer's disease, and immune system effects in Alzheimer's disease caregivers.

BLOCK GRANT FUNDING FOR ELDERLY MENTAL HEALTH SERVICES

Mr. Roybal: What percentage of the Alcohol, Drug Abuse, and Mental Health Administration block grant funding was used for elderly mental health services in FY 1990?

Dr. Goodwin: The Block Grant permits maximum flexibility for the States in identifying communities and individuals considered at-risk for ADM disorders and the development of a State plan for meeting these needs, subject to the legislative hearing process as required under the Block Grant. The Block Grant legislation does not specify that the State is to expend these funds for elderly mental health services.

The States are required to submit an annual report to the Secretary describing the activities of the State regarding the Block Grant, which includes the recipients of these funds, and the progress made by the State toward achieving the purposes for which the funds are made available. Since the Block Grant does not require mental health services for the elderly, information on funding directed to this group is not available from these reports.

Mr. Roybal: What percentage is projected for elderly mental health services for FY 1991?

Dr. Goodwin: These data are not collected.

LONG-TERM CARE OF THE ELDERLY

Mr. Roybal: The primary source of care for the elderly, both over the long term and in crisis situations, is the family. Is NIMH currently conducting, or will it conduct in the future any research on the family's ability to provide such care and on what can be done to improve this ability?

Dr. Judd: The NIMH is currently supporting and will continue to support research on family caregivers who provide care to their elderly relatives. Because of the chronic nature of many illnesses of the elderly this research must be longitudinal in nature. The major foci of this research will continue to be on understanding the long term biopsychosocial consequences of caregiving on the caregiver, the development of effective clinical treatment strategies to assist family members, and the development of behavioral and psychopharmacological treatments for the Alzheimer's disease patient.

Mr. Roybal: Please describe NIMH's project grants to investigate behavioral and social aspects of elderly psychological impairment, including the amount and handling of stress on families and caregivers of psychologically impaired elderly persons.

STRESS ON FAMILIES OF THE ELDERLY

Dr. Judd: A major focus of NIMH supported project grants are to investigate the behavioral and social aspects of elderly psychological impairment including the examination of stress on families and caregivers of psychologically impaired elderly persons.

Our research support in these areas is very broad and includes investigations of the social and psychological characteristics of the chronically mentally ill elderly who are homeless or in SROs. We also support research to better understand and treat the behavioral manifestations of mental disorders in the elderly including: studies examining affective disorders and risk of suicide in the elderly; studies examining disruptive or apathetic behaviors commonly found in nursing homes such as agitation and aggression, etc.; studies examining sleep disorders; and studies which focus on psychosocial and behavioral research or treatment for Alzheimer's disease or other dementias. As I mentioned earlier we have an extensive portfolio which is focused on family caregivers of psychologically impaired elderly persons. A recent NIMH workshop highlighted exciting, but disturbing, new findings in this area by our grantees, based on the use of highly technical psychoneuroimmunological techniques. These findings suggest that some caregivers (particularly elderly spouses) providing chronic care may themselves be at risk for psychological and biomedical impairment involving immunological, cardiovascular and neuroendocrine functioning. In addition, there is some preliminary data that some older caregivers, whose systems may be more vulnerable, do not bounce back after an episode of chronic caregiving. Future research is needed to confirm and expand on these findings and to understand their implications on caregiver health and mental health. In light of these findings, the NIMH is now supporting a study designed to treat specific caregiver needs using both psychological and biomedical measures of treatment success.

MENTAL HEALTH CLINICAL TRAINING

Mr. Roybal: Please outline the activities which have been carried out through the ADAMHA's mental health clinical training programs.

How many clinical training awards were funded in FY 1990 and how many are planned for FY 1991?

Dr. Judd: In FY 1990, NIMH estimates 158 grant and contract awards and in FY 1991 the estimate is 65.

Of the 158 awards in FY 1990, 86 are for Institutional grants, 41 are Faculty Scholar, 29 are State Human Resource Development and 2 contracts/interagency agreements.

Of the 65 in FY 1991, 42 are Institutional grants, 9 are Faculty Scholars, 12 are State Human Resource Development and 2 contracts/ interagency agreements.

Mr. Roybal: What was ADAMHA's total number of applications for mental health clinical training?

Dr. Judd: In response to this year's Requests for Application, 130 Institutional Clinical Training applications were received, while 16 applications were received in response to the Individual Faculty Scholar Awards announcement.

Mr. Roybal: Of these applicants, how many were racial/ethnic minorities, including Hispanic Americans?

Dr. Judd: 35 of the 130 Institutional Clinical Training applications were exclusively, directed to minority and disadvantaged students. The other 95 applications in the institutional clinical training program are, based on a preliminary review, heavily oriented to minority issues, although it is not possible to provide precise figures at this time. While the Individual Faculty Scholars program is not structured to enable ready identification of minority status, it appears that at least three, perhaps more, of the faculty scholars nominees are minorities, at least one of whom is Hispanic American.

Mr. Roybal: How many of these awards were related to elderly mental health?

Dr. Judd: Of the 130 Institutional Clinical Training Program applications, 16 are focused on the aging. Four of these are exclusively focused on minority and disadvantaged concerns, while 12 are in the General Professional Training program and quite likely have some minority emphasis. Additionally, there are 11 multipriority applications, and it is assumed, but cannot be precisely determined at this time, that aging is a concern of these applications to some degree.

With the respect the Individual Faculty Scholars Awards program, 1 of the 16 applications in that category is focused on the aging.

Mr. Roybal: What level of funding would be needed to meet the training needs related to elderly mental health?

Dr. Judd: It not possible to be fully responsive to this question since the applications are currently being reviewed. This year's round of institutional and faculty scholars clinical training applications includes 17 for elderly out of a total of 146. In the unlikely event that all aging applications were approved at fundable levels and all awarded the maximum of $80,000 per year, the first year cost would be approximately $1 million.

COGNITIVE IMPAIRMENT

Mr. Roybal: Please supply this committee with the operational definition of "cognitive impairment".

Dr. Judd: In the context of its use in long-term care proposals, "cognitive impairment" refers to a global, multifaceted decline in intellectual abilities and functioning that is of a serious enough magnitude to interfere with the individual's ability to function independently and to manage one's own everyday affairs and own self-care autonomously. Such impairment of cognitive functioning, although relatively more common in the elderly population than at younger adult ages, is not characteristic of the normal aging process, and indicates a clear-cut need for professional evaluation of the individual, for such cognitive impairment may be a sign of brain disorders or other physical disease. Most typically in elderly individuals, the cognitive decline or loss generalizes across multiple abilities, such as memory, orientation, perception, comprehension, psychomotoric coordination, judgment and abstract thought, and other higher cortical functions. Often, changes in personality, emotional state and behavior are closely associated.

Mr. Roybal: Several long term care proposals have included "cognitive impairment" as a condition for eligibility. what tools are available to measure "cognitive impairment"?

Dr. Judd: A wide variety of psychological and neuropsychological testing procedures and standardized interviewing techniques are available to guide and assist the trained clinician or researcher in assessing and measuring cognitive impairment. In general, all of the available tools have the strategy of comparing the individual's measured performance on select tasks with normative information on how normal, healthy people of similar ages and backgrounds perform those tasks; some procedures probe for "pathognomonic signs," i.e., types of performance never exhibited except by individuals with underlying pathology.

Choices among available tools depend primarily on the depth and breadth of information needed about the individual's function to answer the diagnostic question, the time and resources available for carrying out the evaluation, and the amount of normative background information developed for the procedure. Many of the briefer tools are essentially standardizations of the sort of "mental status" evaluations traditionally conducted by neuropsychiatric specialists.

A compilation of commonly used assessment instruments was published in a special issue of NIMH's Psychopharmacology Bulletin in 1988. This volume, "Assessment in Diagnosis and Treatment of Geropsychiatric Patients" was distributed widely throughout the field and is available without charge to those requesting it.

Mr. Roybal: What data is available that assesses the relationship between psychological measures of cognition in the elderly and their ADL functioning?

Dr. Judd: Relatively large amounts of data are available regarding patterns of ADL or "Activities of Daily Living" functioning in the elderly, such as from the National Long-Term Care Survey, but rarely has such research simultaneously collected detailed information on the cognitive functioning of these subjects, such as is afforded by psychological test measures. Very little empirical data are available that examine closely, on a point-by-point basis, the correspondence between cognitive and ADL measures. Research by Dr. M. Powell Lawton at the Philadelphia Geriatric Center, where some of the ADL measures most commonly used were developed, however, has tended to support the conclusion that cognition is a distinct domain from that of ADL functions, which are part of a different domain of "functional health."

It was for reasons of this distinction, and of the paucity of research data on the correspondence between specific cognitive and ADL measures, that the Advisory Panel on Alzheimer's Disease in its initial report criticized the seeming attempt in some long-term care proposals to equate degrees of cognitive impairment with degrees of ADL impairment. Measurement of only one of these two areas does not suffice to substitute for assessment of the other; both domains require specific attention.

Better data are needed, however, on their expected interrelationships. NIMH is currently funding research that examines these issues, such as whether neuropsychological assessments during hospitalization can accurately predict patients' specific functional skills during post-discharge adjustment. Preliminary findings have suggested that neuropsychological test results have reasonable predictive power in this regard if the functional or ADL skills involve a substantial cognitive component. More detailed analyses of ADLs in terms of the human factors involved in each form of activity will be required to increase understanding and precision in this area.

Mr. Roybal: Recent long term care proposals address both physical and mental illnesses as criteria for eligibility for long term care services. What tools are available and best for assessing loss of function due to mental illness and for determining long term care service needs?

Dr. Judd: It must be recognized that the standard procedures for diagnosing mental disorders include, as a central component, the clinical evaluation of loss of function or interference with everyday functioning.1 The diagnosis of mental illness therefore typically includes a judgment regarding the functional significance of the other manifestations of the disorder. The Diagnostic and Statistical Manual of the American Psychiatric Association includes a procedure for rating the individual's overall level of functioning.

When a finer-grained assessment of function is required, a variety of measures are available, depending on the area of function to be assessed. For example, numerous clinical rating scales and self-report questionnaires have been developed that measure patients' degree of social functioning and personal adjustment within a community. For some purposes, assessment of the patient's job attendance and performance and ability to maintain employment may be the most essential measure of function.

Among older patients most apt to be evaluated for long-term care needs, a large variety of testing procedures are available for assessing loss of cognitive function. Ultimately, however, needs for long-term care center about the individual's ability for independent living and self-care, and for these issues simple measures of so-called "activities of daily living" (ADLs) typically offer the most direct and relevant form of assessment. To be distinguished are scales assessing ability to perform ADLs of fundamental physical self-maintenance (eating, dressing, grooming, toileting, mobility, etc.) from scales assessing ability to perform more instrumental activities important in everyday life (IADLs, such as use of telephones, transportation, money, etc.). Impairments in either area may necessitate long-term care services, but frequently of different types.

MENTAL HEALTH NEEDS IN NURSING HOMES

Mr. Roybal: Given the special problems facing nursing home residents with mental health problems, what ADAMHA research has been conducted on the status of those residents and what interventions and care strategies are most effective?

Dr. Judd: NIMH has maintained a longstanding concern for the mental health problems of nursing home residents, and has attempted to promote and foster research in this area, as exemplified by the issuance in 1984 of a special program announcement soliciting "Research on Mental Illness in Nursing Homes" and by the funding of one Clinical Research Center in a nursing home setting. A great deal of the research information to that date was published in the 1986 NIMH publication, Mental Illness in Nursing Homes: Agenda for Research, (DHHS Publication No. [ADM] 86-1459). NIMH continues to promote and support research into these and related issues, including (as recent examples) studies of a psychiatric intervention program for dementia care in nursing homes, patterns of psychotropic drug prescribing in these facilities, care of elderly mental patients in board and care homes, and issues of work stress and morale among nursing home employees as a factor influencing care.

SUBSTANCE ABUSE AND MISUSE

Mr. Roybal: What information has ADAMHA obtained on the incidence of drug and alcohol abuse and misuse among the elderly?

Dr. Goodwin: The abuse of illicit drugs does not seem to be a common problem, but the misuse of prescription drugs may be. For example, data from the Drug Abuse Warning Network indicate that the elderly (age 60 and over) are involved in only 1.7 percent of all emergency room episodes involving drugs. Most of these episodes are associated with licit drugs such as sedatives. Relatively few are associated with illicit drugs. For example, only two-tenths of one percent of all episodes involve the use of cocaine by people aged 60 or over.

Issues surrounding drug abuse by the elderly appear to be quite different from that in younger populations. For example, drug abuse by the elderly may be more associated with declining health than euphoria seeking. Also, changes in physiology that occur with aging may alter the effects of drugs on the elderly. NIDA will increase research in this area in the future.

Mr Roybal: What types of project grants does ADAMHA anticipate awarding regarding drug and alcohol abuse and misuse initiatives?

Dr. Goodwin: NIDA supports a full range of research on drug abuse, including basic biomedical studies to determine how drugs effect the brain, studies of the effect of drug use on behavior, clinical trials of new medications for the treatment of drug abuse, evaluations of drug abuse prevention and treatment techniques, and studies of the incidence and prevalence of drug abuse. NIDA also supports research project grants to develop more effective ways of preventing the transmission of HIV infection among intravenous drug abusers.

The National Institute on Alcohol Abuse and Alcoholism supports basic, clinical and epidemiological studies related to: drinking patterns and causes, health and safety issues, alcoholism treatment, the effects of genetic, problems affecting special populations, medical consequences of alcoholism, risk factors, prevention, incidence and prevalence and homelessness.

OTI will fund several types of drug abuse demonstration grant programs in 1991. One of OTI's grant programs, which began in 1990, is for specific population sub-groups designated as a "critical population". These grants are three year demonstrations that will enhance existing treatment program/systems for the following critical populations: racial/ethnic minority populations; adolescents; residents of public housing projects; rural residents; and the homeless or those in danger of becoming homeless. OTI will also fund demonstration grants for treatment programs within the criminal justice system and treatment improvement demonstrations in urban jurisdictions to implement overall systemic treatment and delivery improvements of metropolitan areas.

The Office of Substance Abuse Prevention (OSAP) has projects which include OSAP's client-oriented programs, such as the High-Risk Youth and the Pregnant Women and Infants programs that target subgroups of the population who are at increased risk for developing alcohol or drug abuse problems and identify individuals within these subgroups who have begun to exhibit symptoms of the problem; and the community systems programs, such as the Community Partnership program, that focus on assisting communities to develop sound, long-term prevention programs.

The FY 1991 Justification of Appropriation Estimates for the Committee on Appropriations (Volume VII) previously submitted to the

Congress summarizes in more detail, a number of the initiatives in research, prevention, and treatment (pages 109 through 195).

Mr. Roybal: From these project grants what percentage will focus on the needs of the elderly population?

Dr. Goodwin: Since the abuse of illicit drugs, as opposed to the misuse of prescriptions drugs, does not seem to be a common problem among the elderly, NIDA and OTI are not focusing specifically on this issue. In OTI, the elderly population would be served only as they are included in the other drug abusing populations that OTI grant programs are targeted toward. In the area of alcohol abuse, however, approximately 5 percent of NIAAA's studies, including a multidisciplinary center, focus on the aging process and the elderly.

Mr. Roybal: What percentage will focus on preventative initiatives?

Dr. Goodwin: NIDA's prevention efforts comprise approximately 12 percent of the regular research budget and 21 percent of the AIDS budget.

Approximately 10 percent of NIAAA's research, including a multidisciplinary center, focus on prevention research.

All of the demonstration projects supported by the Office for Substance Abuse Prevention focus on the prevention and early intervention of drug and alcohol abuse.

RURAL AND INNER CITY POPULATIONS

Mr. Roybal: Please provide the committee with the most recent assessments by ADAMHA on the state of mental health in rural and inner city populations, including any special assessments with regard to older persons.

Dr. Judd: The most recent assessments by NIMH supported researchers suggest three major areas in which future research on the rural elderly should focus because of the weakening of the elders support system due to out-migration and the geographically isolated areas in which many rural elderly live. First, there is a need to find new methods to identify, assess, and treat those isolated and rural elderly with mental disorders; in particular, those suffering from anxiety, depression, psychosis, cognitive dysfunction, and those at risk for suicide. Second, research should focus on the special problems of persons with Alzheimer's disease living in rural areas, with a particular emphasis on issues relating to access and care, quality of care, caregiver stress and burden, and behavioral management of associated mental and behavioral symptoms. Third, there is a need to develop more efficient and effective treatment and management strategies for the rural elderly with coexisting physical and mental disorders.

In regards to the special problems of older persons in the inner city, NIMH-supported investigators continue to examine the prevalence of mental disorder and the need for treatment in special populations such as the homeless, those living in board and care and other single room occupancy settings, and those with histories of mental disorder or substance abuse.

HIV/AIDS

Mr. Roybal: Recent research suggests that serious contemplation of suicide among HIV infected persons may occur at a rate 16 to 40 times more often than among peer population groups. This data, coupled with the critical role of mental health services in sustaining behavior change among the HIV infected strongly point to the need for mental health services. In 1988, Congress authorized the creation of a mental health research demonstration program to assess the efficacy of mental health interventions for persons experiencing adverse reactions to an HIV test. While ADAMHA has convened an expert group to develop a model protocol for this program, the agency has not requested funds for administration of this activity and has indicated that HRSA is expected to take a lead role in this area. On the other hand, HRSA has not requested funds for this initiative in the FY 1990 budget either. How can ADAMHA neglect a role which seems so vital to its mission in the area of research, national leadership and development of model programs?

Dr. Judd: In response to the HOPE legislation, NIMH and HRSA are working together in FY 1990 to evaluate existing HRSA programs which include a mental health counseling component. In FY 1989, NIMH developed an HIV-related counseling strategy following a meeting of research and clinical experts in HIV mental health counseling. Currently, NIMH and HRSA are developing a process to assess the mental health counseling components of HRSA AIDS Service Demonstration Programs. This is consistent with the provision in the counseling strategy that counseling and mental health services for HIV-infected individuals [and their friends and others] would be most appropriately provided within an ongoing health service program. An assessment of existing counseling approaches appears to be a reasonable strategy to review the state of knowledge regarding effective mental health counseling and gaps in mental health treatment related to HIV infection and AIDS.

NIMH continues to place a priority on research to develop, implement, and evaluate pre- and post-HIV antibody test counseling and ongoing mental health counseling designed to prevent both severe psychological consequences and behaviors that will further transmit HIV infection. In October 1989, NIMH convened a group of research experts in the area of AIDS and suicide. Meeting participants identified a set of research needs in this area, and the Institute is engaged in a series of research development activities to stimulate needed studies on suicide among HIV infected individuals.

In FY 1991, NIMH will continue to work with HRSA and their grantees. NIMH and HRSA will convene a meeting of staff in projects that are providing mental health counseling to discuss ongoing mental health counseling strategies. NIMH will provide technical assistance necessary to facilitate the integration of these mental health and counseling services into ongoing health care programs for this population.

The FY 1991 NIMH budget does not include funds to provide support for a demonstration program to evaluate mental health counseling strategies related to HIV infection and AIDS. NIMH took the lead to convene a meeting of 11 mental health organizations in January 1990 to consider policy and practice issues related to mental health services and the severely mentally ill.

NIMH also continues to take the lead responsibility to stimulate studies to identify successful mental health counseling approaches for individuals who are infected and affected by HIV and AIDS. An NIMH Prevention Workgroup Meeting in March 1990 identified research priorities regarding the role of pre- and post-HIV antibody test counseling in preventing the further spread of HIV infection.

In the NIMH Health Care Worker Training Program, health and mental health care providers are being trained in pre- and post-test counseling techniques as well as the recognition and treatment of psychosocial and neuropsychiatric consequences of HIV infection and AIDS. AIDS mental health training is currently being integrated into the ongoing health care training being provided through the HRSA AIDS Education and Training Centers.

Mr. Roybal: I note with great concern that the number of new competing research grants at ADAMHA for AIDS is being reduced by 36 percent in the President's FY 1991 budget request. This kind of reduction will have a disastrous effect on efforts to prevent HIV infection. At a time when we need to better understand how to prevent the spread of the virus, the President is proposing this reduction. What is the purpose of this reduction?

Dr. Goodwin: The ADAMHA research portfolio is of excellent quality and the quality of this portfolio continues into FY 1991 supported by the largest dollar amount in history for ADAMHA AIDS research project grants. ADAMHA strives to provide stable funding over time. Fluctuation in the total amount of dollars available often has a destabilizing effect on the research community. In FY 1990, ADAMHA received large increases in the number of research project grants.

Mr. Roybal: Will it not send the wrong kind of signal to scientists looking at AIDS prevention and other relevant issues in the ADAMHA portfolio?

Dr. Goodwin: Since ADAMHA received large increases in FY 1990 in the number of research project grants, the message to the scientists is not one of non-support but rather of erratic support. Continuation costs of the FY 1990 projects, by necessity, will consume a large portion of the funding available for research in FY 1991. In total, the number of AIDS research project grants will increase by 50 compared to 1990 and 157 compared to 1989. This represents a record high level of support for these research project grants.

Mr. Roybal: What levels of funding would be required to maintain level funding of the research effort?

Dr. Goodwin: The FY 1991 President's Budget proposes a 23 percent increase for AIDS research over FY 1990. This includes a record high level of 330 research project grants.

Mr. Roybal: What level of funding would be needed to meet the scientific research need?

Dr. Goodwin: We are satisfied with the FY 1991 President's Budget request for AIDS research which increases by 23 percent over FY 1990. Increased funding for research, especially in this high priority area, can always be used but this needs to be balanced against other competing demands on our resources such as drug treatment and Head Start.

AIDS PREVENTION

Mr. Roybal: NIMH just sponsored a historic event, bringing together researchers and service providers in the primary AIDS prevention arena with the various PHS agencies (CDC, NIMH, NIDA, and HRSA) that have taken some stake in the prevention agenda. The Congress has long believed that closer collaboration was needed between the AIDS prevention agencies particularly around prevention program design and evaluation. What kinds of initiatives are needed to promote closer collaboration between research and services?

Dr. Goodwin: ADAMHA is committed to developing closer collaboration between research and services. Among our recent efforts, ADAMHA created the Office for Treatment Improvement. Along with the Office for Substance Abuse Prevention, this office bridges biomedical and behavioral research with substance abuse treatment and prevention systems to convey new information to providers and to provide feedback which helps sharpen our research focus. ADAMHA continually seeks to establish collaborative and cooperative bridges with other PHS Agencies as well as outside organizations. For example, we have collaborated with HRSA to develop innovative models of linking primary care and drug abuse treatment. In addition, NIMH recently cosponsored with CDC the National Research Council study of AIDS behavioral research, a program announcement on behavioral change research, and an FY 1990 announcement to initiate "Multi-Site, Multi-Population Behavioral Trials to Prevent the Further Spread of HIV Infection." ADAMHA also supports the development of networks of service providers, researchers, and administrators, and the transfer of research-based knowledge to such consortia through conferences, seminars, and publications.

Mr. Roybal: Where is this collaboration best housed administratively (ADAMHA, CDC, or the National AIDS Policy Office)?

Dr. Goodwin: Identifying potential opportunities for interagency collaboration should not be formally located in an administrative unit. Rather, it should remain incumbent upon each agency to negotiate cooperative and collaborative efforts in accord with their respective missions. To facilitate such efforts, ADAMHA holds a variety of interagency meetings throughout the year. These meetings include the biweekly meetings of the PHS HIV Executive Task Force and the biweekly meetings of the HIV Leadership Group. The PHS HIV Executive Task Force is composed of AIDS Coordinators from the respective agencies, the Director and staff of the National AIDS Program Office, as well as, other OASH staff and representatives from other federal agencies. This Task Force is designed as an informational forum where new information is brought to the forefront and collaborative efforts are explored. The HIV Leadership Group is comprised of the Assistant Secretary of Health, the Director of the National AIDS Program Office, and the Heads of the respective agencies. This group formulates PHS HIV policy and develops HIV related national leadership plans.

Traditionally, with interagency initiatives which require participation of staff and resources from multiple agencies, the agency with the most significant contribution takes lead responsibility. For initiatives requiring participation with staff and resources from multiple agencies, it has generally been the practice to have the agency with the most significant contribution take the lead responsibility (e.g. NAS study with CDC as lead agency).

Currently, NIMH is participating in a number of collaborative activities with NIH, HRSA and CDC. For example, NIMH cosponsored with CDC the National Research Council study of AIDS behavioral research, a program announcement on behavioral change research, and an FY 1990 announcement to initiate "Multi-Site, Multi-Population Behavioral Trials to Prevent the Further Spread of HIV Infection."

NIMH also works collaboratively with HRSA to integrate education on the neuropsychiatric and psychosocial aspects of HIV infection into the ongoing health care provider training programs supported by the HRSA Education and Training Centers. HRSA and NIMH are also working together to disseminate a national strategy on HIV counseling and to identify successful approaches to HIV-related mental health counseling within HRSA-sponsored AIDS Service Demonstration Projects.

In each of these efforts, NIMH has maintained the lead responsibility for efforts directed toward understanding risk factors which may place individuals at risk for HIV infection, and particularly areas related to the mental health consequences of those behaviors. NIMH has staff with expertise in the behavioral sciences in both the AIDS Program and in other operating components.

Mr. Roybal: What kinds of funding levels would be required to adequately support such programs in FY 1990?

Dr. Goodwin: To implement the recommendations from the NIMH, NIDA, CDC, and HRSA meeting would require funds for behavioral research and prevention, as well as service activities. In FY 1990, NIMH will explore the feasibility of implementing the specific recommendations for collaborative efforts between researchers and service providers.

The proposed program for pilot funding would require approximately $1 million in the first year to support 20 projects.

A technical assistance program to provide evaluation skills to community prevention programs would require $500,000 for consultation and travel to 25 sites.

NIDA has the funds they require for these efforts in FY 1990.

RESEARCH VS. SERVICES, CLINICAL TRAINING, ADVOCACY AND DEMONSTRATIONS

Mr. Stokes: Your biography describes ADAMHA as being comprised of three research institutes and two offices charged with public health applications of research. In characterizing NIMH, NIAAA and NIDA as research agencies, does this express your intention to remove their service, clinical training advocacy and demonstration functions? I raise this issue because it is clear from your budget that these programs have been sacrificed in favor of research.

Dr. Goodwin: While it is true that research increases are proposed for 1991, these funds do not necessarily derive from reductions in services, clinical training, and demonstrations. In fact, the research portion of our budget will actually decline from 38 percent in 1989 to only 33 percent in 1991 as a result of increases in other programs. Since implementation of the ADAMHA Block grants, our major vehicle for supporting direct treatment costs is through this mechanism. The federal commitment to increase support for treatment, especially in the area of drug abuse, can be seen in the large block grant increases over the past several years, including the 8.3 percent increase proposed for 1991.

With respect to clinical training, our concern over the years has shifted from generic training of mental health professionals to programs meeting the training needs of health professionals, counselors, and community leaders involved in providing substance abuse prevention and treatment services. The budget request reflects this by phasing out financial support for mental health clinical training while maintaining a strong emphasis on substance abuse training.

The focus of demonstration projects has also changed over the past few years. Demonstrations are intended to examine the best method of addressing a particular problem, translating our findings into generally accepted practice if warranted, and ultimately phasing out the direct federal commitment. They are not meant to be ongoing service delivery programs. Thus in 1991 we have phased down some but not all of our alcoholism, drug abuse, and mental health demonstrations and proposed a substantial increase in prevention demonstrations. Again, this shift in emphasis is based on individual program considerations, not sacrifices made in lieu of more research support.

BUDGET REQUEST TO THE DEPARTMENT

Mr. Stokes: What was your request to the Department for the following:

NIMH--Clinical Training, Community Support Demonstrations, Homeless Services Demonstrations, Protection and Advocacy;

NIDA--Treatment Demonstrations; and

NIAAA--Substance Abuse Homeless Demonstrations.

Dr. Goodwin: Our request to the Department for each item you listed was as follows:

NIMH: Clinical Training--$5,000,000
CSP Demonstrations--$19,627,000
Homeless Services Demonstrations--$11,880,000
Protection and Advocacy--$8,000,000

NIDA: Demonstrations--$147,537,000 (our request does not distinguish between Treatment and prevention demonstrations)

NIAAA: Substance Abuse Homeless Demonstrations--$17,561,000

Mr. Stokes: How does the work conducted by OTI and OSAP feed back into ADAMHA's research program? What specific linkages are set up for this purpose?

Dr. Goodwin: ADAMHA's research program for substance abuse treatment and prevention is located in the National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism, which work cooperatively with both the Office for Substance Abuse Prevention (OSAP) and the Office for Treatment Improvement (OTI).

As OTI works with treatment practitioners and gains data from evaluations of its grant initiatives, it will generate hypotheses to be tested in more controlled clinical trials conducted by the Institutes. OTI is already working with the Institutes to design studies that may lead to improved treatment in correctional and residential settings. OTI is planning to develop collaborative grant programs with each of the three ADAMHA Institutes around such issues as pregnant and postpartum women (NIDA), treatment for the dually diagnosed (NIMH), and screening and treatment of homeless substance abusers. The Institutes will finance the research portion of these studies and OTI will support the service delivery activities.

It is in the services research area that OTI will be most active by identifying financing and cost/benefit studies, studies of treatment practices, and studies of how the treatment field is organized. OTI is an active member of the work group guiding NIDA's technology transfer program and will serve as the primary dissemination vehicle for NIDA's state of the art treatment practitioner's materials. NIDA and OTI are currently involved in cooperative efforts in which OTI funds treatment demonstrations and NIDA supports the research and evaluation components in those programs. NIDA and OTI presently have an outstanding solicitation for a cooperative agreement to develop, implement, and evaluate a treatment demonstration program in the District of Columbia.

The NIAAA and OSAP plan to jointly sponsor community-based trials of interventions to prevent alcohol related problems. NIAAA has expertise in developing community-based research, while OSAP has experience in the implementation of community-based demonstration projects. The research announcement is currently being prepared by the Prevention Research Branch of NIAAA with input from OSAP staff. Funding will be shared by the two ADAMHA components.

In 1989 NIAAA issued a request for applications for an Adolescent Research Center. Such a center would study aspects of adolescent development that lead to alcohol problems and strategies to reduce those problems. Three applications have been received, and peer review site visits will take place this summer. It is anticipated that such a center would conduct basic and applied research directly relevant to OSAP's programmatic interests.

OSAP has established informal linkages, primarily in the form of staff workgroups, to review and exchange information related to prevention and prevention programming. Examples include the NIAAA/OSAP training workgroup, and the Institute/OSAP evaluation workgroup. Efforts to formalize linkages and coordinate and strengthen overall agency prevention efforts are the focus of the prevention coordinator workgroup, chaired by the Associate Administrator for Prevention.

Within its demonstration program, OSAP contractors are currently reviewing the program findings from the original 1987 grantees. Within the information to be developed will be a summary of testable hypothesis which will then be referred to the research institutes for further study.

OTI STUDY ON OHIO'S MENTAL HEALTH DELIVERY SYSTEM

Mr. Stokes: Dr. Primm, I want to welcome you in your first appearance before this committee.

I understand that Ohio's mental health delivery system has been selected for an OTI special study. Please tell me about this study.

Dr. Primm: OTI has contracted with the Mental Health Policy Resource Center to conduct a case study of the Ohio experience in mental health system change during the 1980s. During that time, Ohio has moved successfully from a large traditional system of care to one emphasizing community-based, patient-oriented services. Other States can learn a great deal from Ohio's experience in this sustained effort. OTI's Block Grant technical assistance program plans to produce and disseminate a publication based on the Ohio case study, in order to share Ohio's example with the rest of the nation.

WAITING LIST REDUCTION GRANTS

Mr. Stokes: The waiting list reduction grants were created in FY 1989 to help alleviate the national shortage of drug treatment slots and services. Last year, $64 million went toward this purpose. This program is not authorized for FY 1991 and no funds have been requested. In your professional opinion, to what extent has this program been successful and is there a need to continue funding it?

Dr. Goodwin: One of the most difficult issues facing the drug treatment community is how much capacity is needed to adequately meet the need for services. We all wish to assure that all who need treatment and either seek it voluntarily or are directed toward help are able to gain assistance. No doubt, this was the intent of Congress in authorizing the Waiting List Reduction Grant Program in FY 1989.

I am pleased to report that as a result of the $100 million Waiting List Reduction Program, approximately 90 percent of the new treatment slots requested by eligible applicants have been funded. If all grantees meet their projected expansion schedules, 19,000 new slots will have been established.

It is not possible to use information from the Waiting List program to answer the question of whether we now have enough treatment capacity to provide needed treatment. Because the Waiting List Reduction statute required programs to provide some assurance that funds would be available to pick up the costs of the new treatment slots after the period of Federal support, many State and local drug treatment officials decided not to apply for funding. So, we do not know the extent to which the applicants for Waiting List Reduction funding represent the universe of programs in need of expansion.

In addition to the incomplete picture provided by the Waiting List applicants, and possibly more important, is the question of how well the drug treatment system is able to match individuals needing treatment to available services. In most communities, there is no system in place, such as a central intake and referral center, to locate available treatment slots for those seeking treatment. As a result, some programs may have long waiting lists while others operate well under capacity. We must do a better job of matching clients to the earliest available treatment and until we do this, we will not be able determine appropriate treatment expansion needs.

While we are still evaluating the need to continue funding the waiting list program, it is important to make two points. First, waiting lists are not a reliable measurement of need and second, the large increases in the block grant program nearly double the number of Federally funded treatment slots in 1991 compared with 1990 (from 47,269 to 81,888). This significant increase in treatment capacity should go a long way toward reducing waiting lists.

PROGRAM HIGHLIGHTS RELATIVE TO MINORITIES

Mr. Stokes: What recent advances would you highlight that have particular relevance to racial and ethnic minorities?

Dr. Goodwin: Minority research training has been substantially increased over the past two years, even though the overall research training budget has been essentially constant and we have had to raise trainee stipends in all of the programs. We have increased the number of Minority Fellowship Programs to six, a new research MFP in Psychiatry was begun this year, and the total funding of the MFPs from $1,189,442 in FY 1988 to $1,648,080 in FY 1989, and estimated funding for FY 1990 of $1,831, 000.

In addition, we funded three new Minority Access to Research Careers Honors Undergraduate Programs in FY 1989 focusing on training American Indians, Native Hawaiians, and Hispanics, at the University of New Mexico, University of Hawaii, and the University of Puerto Rico. The total NIMH funding of the MARC Honors Undergraduate Program has increased from $648,755 in FY 1988 to $1,008,406 in FY 1989, and estimated funding for FY 1990 of $1,053,859. In FY 1989, we also funded two MARC Faculty Fellows for additional postdoctoral research training.

We have also expanded our short term training of minority undergraduate students by funding a new program at the University of California-San Francisco that provides a research intensive experience to 25 minority students from all over the United States in the areas of neuroscience, psychology, and mental health services research. We also continue to support short-term summer training in psychology at the University of Delaware.

To assist minority researchers in developing successful research grant applications, a series of regional workshops have been held as well as an intensive technical assistance workshops. Researchers who have completed two of the three phases of the program are being provided extensive mentoring by experts in their area of research over an 18 month period to help them develop their research with the goal of their being able to submit a successful research grant application. These seminar/workshops have targeted mental health services research and AIDS research programs.

A new Minority Institutions Research Development Program was announced April, 1989 to assist minority institutions to 1) develop their institutional and faculty research capacity, 2) fund individual research projects, and 3) support students as research assistants. This program was developed after an evaluation of NIMH supported MBRS research projects, and consultation with an advisory committee concerning the recommendations from the evaluation. Thirteen institutions have submitted applications which are being reviewed.

A Minority Research Centers announcement was issued in March, 1989 to support additional centers and 9 applications are currently being reviewed. At present, NIMH is supporting 4 Minority Research Centers--Fordham University (Hispanic), University of California, Los Angeles (Asian American), University of Texas, Medical Branch (Hispanic and Black), and University of Colorado (American Indian).

A new announcement of Supplements for Underrepresented Minorities in Biomedical and Behavioral Research was issued by ADAMHA that will provide support for undergraduates, graduate students, and postgraduate minorities to work with regular research grantees of ADAMHA. This program will enable minority persons to become involved in research with persons who have funded grants from NIMH and represents a very significant additional opportunity. We expect to fund a number of supplements this year.

Minority populations suffer adverse consequences resulting from drug abuse including not only negative effects on employment, school achievement, and family stability but also increased morbidity and mortality. Racial, ethnic, and cultural factors are likely to have an influence on virtually every area of drug abuse, including the initiation of drug use, the choice of drugs, the nature and extent of peer influence on drug use, the "style" of abuse (i.e., route of administration, frequency, and pattern of use), perception of drug abuse treatment (e.g. its availability, accessibility, and effectiveness), and relapse to drug use after treatment.

Both prevention and treatment programs must reflect the ethnicity of the community which they serve if they are to be effective. AIDS is a severe problem among blacks and Hispanics primarily because of intravenous drug use. This overrepresentation of minorities with AIDS is also reflected in cases of AIDS among their heterosexual partners and newborns.

Several NIDA studies are examining the effects of drug use on school dropout rates in minority communities. A three year study of drug abuse among Mexican American dropouts is underway. Initial data analyses from this study indicate that drug use is one of the variables that distinguishes dropouts from others.

Four factors stand out related to high levels of substance abuse among high-risk black youth. The first factor is the occurrence of negative life events in the youth's life during the past year (for example, events such as the death of a close family member); second, youths who did not receive support and help from others in coping with stress; third, the youth's relationship with his father (for example, growing up fatherless or with the lack of emotional support); and fourth, lack of involvement in meaningful activities in the community. Youth who reported participating in activities that helped other people and which contributed to the goals of a community group were less likely to abuse drugs.

Alcohol research has only begun to focus on racial and ethnic minorities, yet NIAAA has already witnessed several breakthroughs in research and is excited by the growing potential for significant advances in alcohol research through the study of these groups. NIAAA researchers have found that: 1) There is increased incidence of Fetal Alcohol Syndrome (FAS) in Black and American Indian mothers of low socioeconomic status. The estimated rate in these populations was 2.6 per 1,000 compared to 0.6 per 1,000 from other studies where the mothers were White and of middle socioeconomic status. 2) Blacks, especially males, are at high risk for acute and chronic alcohol-related diseases including esophageal cancer (10 times the rate of that for whites), hepatitis, heart disease, cancers of the mouth, larynx, tongue, esophagus, and lung, and cirrhosis. Though the overall mortality rate for cirrhosis has been declining, it is still disproportionately high among blacks. 3) Although American Indian and Alaska Native women drink considerably less than men, they account for nearly half of cirrhosis deaths. 4) Orientals have increased frequency of the inactive aldehyde dehydrogenase variant that causes them to have a "flushing" response. Epidemiological data indicates that the "flushing" response actually decreases the risk of alcoholism due to its aversive nature. Scientists at NIAAA have proposed a role for selection in the abundance of the aldehyde dehydrogenase variants in these populations.

ADAMHA MINORITY EMPLOYEES

Mr. Stokes: What percentage of ADAMHA's employees are minorities? What percentage of employees at levels GS/GM 14 and above (including Commissioned Officers, SES, etc.) are minorities?

Dr. Goodwin: As of January 1990, 20 percent of ADAMHA's permanent employees were minorities. At levels GS/GM 14 and above (including Commissioned Officers, and SES, 14.6 percent were minorities.

KNOWLEDGE ON ADDICTION RESULTING FROM ALCOHOL ADDICTION RESEARCH

Mr. Stokes: Dr. Gordis, I was told last year, that most of what we know about addiction has resulted from research on alcohol addiction. Is this true?

Dr. Gordis: Important advances in the understanding of the biological basis of alcohol addiction have centered on how alcohol is reinforcing to those who drink it. One major step forward has been in the development of better animal models for alcohol-seeking behavior. With the methods used, investigators have demonstrated that animals will drink significant amounts of alcohol and will work to obtain it. These models are allowing for the study of the specific neural pathways and the responsible neurotransmitters in the brain that mediate the process of alcohol reinforcement.

One area of the brain that is receiving considerable attention is the nucleus accumbens. Since the nucleus accumbens appears to be involved in the reinforcing properties of other substances of abuse, investigators have been trying to find out if alcohol's reinforcing properties are also mediated by this area of the brain. All of the evidence is not yet in, but there are strong inferences that the nucleus accumbens is important in the actions of alcohol. Other areas of the brain are also being investigated.

Dopamine, an important transmitter is the brain, has been implicated in the reinforcing effects of alcohol, as well as in those of other drugs of abuse. Drugs that act like dopamine appear to suppress alcohol intake, suggesting that the drugs substitute for alcohol similar to the way methadone substitutes for morphine and heroin. Other transmitters, such as serotonin, have also been implicated in the reinforcing effects of alcohol. In fact, drugs that enhance transmission through serotonergic neurons have been found to suppress alcohol intake.

Future work in this area promises to provide important clues into the understanding of why people drink to excess. Ultimately, potential therapeutic approaches will be developed that will, hopefully, reduce the medical and social consequences of excessive alcohol consumption.

GENETIC BASIS OF ALCOHOLISM

Mr. Stokes: What can you tell me about the genetic basis of alcoholism?

Dr. Gordis: Evidence of a genetic influence in the development of alcoholism has come from studies of alcoholism in families with multiple cases, in identical versus fraternal twins, in adoptees separated from their biological parents at an early age, in biological and genetic markers associated with alcoholism, and in animal breeding studies.

Earlier studies reported higher concordance of drinking pattern and alcoholism rates among identical than among fraternal twins. Adoption studies also showed that children born to alcoholic parents but adopted during infancy were at greater risk for alcoholism than adopted children born to nonalcoholics. The identification of markers that are genetically transmitted and are associated with alcoholism further pointed to a genetic contribution to the development of alcoholism. Examples of some of the potential markers identified thus far are abnormal electrical brain waves, decreased intensity of reaction to alcohol, such as subjective feeling and changes in levels of prolactin, cortisol, and adrenocorticotropin hormone (ACTH), lower monoamine oxidase enzyme level in sons of alcoholics. Strong evidence of a genetic predisposition to alcoholism also comes from animal breeding experiments producing strains that prefer to drink alcohol or that carry traits such as alcohol sensitivity, alcohol tolerance, and susceptibility to alcohol withdrawal seizures.

Mr. Stokes: I understand that there is more than one form of alcoholism. What implications might this have for minorities?

Dr. Gordis: By studying the interaction of genetic and environmental factors in the development of alcoholism in Swedish adoptees, researchers have identified two types of alcoholism. For the more common type, the "milieu-limited" (or Type 1) which occurs in both men and women, environmental and genetic factors influence the development of alcoholism. For the second type, the "male-limited" (or Type 2) which accounts for 50 percent of male alcoholics and typically has an early onset, genetic factors play a major role in the development of alcoholism. Recognition of gene-environment interaction and the heterogeneity in the etiology of alcoholism will help to identify the genetic and biological markers of alcoholism. This landmark study has directed researchers' attention to the influence of changing patterns of social factors over time and the interactions between social and genetic factors in the development of alcoholism in a subset of an alcoholic population. More accurate classification of alcoholic subtypes will lead to more effective prevention and treatment strategies targeted to specific populations including minorities.

NIAAA PARTICIPATION IN HUMAN GENOME PROJECT

Mr. Stokes: Is NIAAA participating in the human genome project?

Dr. Gordis: No, NIAAA is not participating directly in the human genome project, but some of our grantees may be involved in that endeavor.

However, in September 1989, NIAAA initiated a multidisciplinary, multi-site collaborative study to systematically identify the genes that influence susceptibility to alcoholism. Since these projects are cooperative agreements, NIAAA will have continued scientific input throughout the five year study period. Alcoholics and their relatives will be studied through the lineage of large families, the acquisition of immortalized lymphocytes or DNA for analysis of genetic markers and genetic mapping studies. The association of potential genetic and biological markers with the development of the alcoholism within the families is also being studied. Experts in molecular genetics, genetic epidemiology, mathematical statistics, psychiatry, and physiology will participate in this complex undertaking.

PUBLICIZING WORK AND ACTIVITIES OF NIDA

Mr. Stokes: Dr. Schuster, I am concerned that not enough people know about NIDA and that is why we are hearing proposals to create a National Institute on Addiction. What are you doing to publicize the work and activities of NIDA?

Dr. Schuster: NIDA is of course well known among drug abuse researchers and treatment providers and we are working to improve the dissemination of information to these and other audiences. In the realm of public information NIDA's press and communications activities last year responded to over 2,000 press calls from the print and electronic media and held two major press conferences; and the NIDA Director gave interviews to representatives from local and national media. Three issues of NIDA Notes, our principal technology transfer vehicle, were published and included at least 80 articles on Institute-funded research. NIDA also produced 37 new publications, including 6 Research Monographs. Drugs and AIDS public education materials in the form of TV, radio, and poster ads were widely distributed - all bear the name of NIDA.

NEUROLOGICAL EFFECTS OF COCAINE

Mr. Stokes: When Dr. Murray Goldstein, the Director of the National Institute of Neurological Disorders and Stroke, testified before this committee last week, he told us that his Institute's P.E.T. Centers had been conducting research related to the effect of crack on babies. However, because of budgetary constraints, he was sending these grantees to ADAMHA for funding. What research do you support on the neurological effects of crack? Are you familiar with the NINDS supported research and will ADAMHA be able to support this research?

Dr. Schuster: NIDA is supporting studies of the neurological effects of cocaine in conjunction with NINDS. These studies are being supported at an NINDS supported research center in Brookhaven, New York. NINDS is supporting the core costs of the study and NIDA is supporting a project which will use PET scanning to evaluate the effect of chronic cocaine abuse.

NIMH CLINICAL TRAINING

Mr. Stokes: Dr. Judd, as has been the case for several years, the clinical training program is slated for a major reduction ($8 million). Last year, you told the committee that the NIMH clinical training program has accomplished its purpose -- to increase the supply of trained professionals. Do you feel that this is statement applies to minority mental health professionals?

Dr. Judd: NIMH has no accurate data at this time regarding minority mental health professionals now providing services. A study that would yield such information is being planned by the NIMH Survey and Reports Branch. A survey of presently available studies conducted by the four disciplinary professional organizations is incomplete, but preliminary data suggest that fewer than 10 percent of current mental health professionals are racial/ethnic minority.

Mr. Stokes: To what extent does the clinical training program serve disadvantaged populations?

Dr. Judd: Two clinical training Requests for Application (RFA) were issued in 1989, Institutional Clinical Training Grant and Individual Faculty Scholar Awards. The Institutional Clinical Training Grant RFA is divided into two parts, General Professional Training Program and Professional Training for Racial/Ethnic Minority and Disadvantaged Students. The latter is exclusively addressed to the recruitment and training of minority and disadvantaged students. The General Professional Training portion, while not exclusively focused on minority disadvantaged populations, makes clear the expectation that minority and disadvantaged students and populations, as well as ethnic minority curriculum content, be a part of the proposal. The Individual Faculty Scholar RFA expressly encourages minority candidates to apply for these awards.

OSAP HIGH RISK YOUTH PROGRAM

Mr. Stokes: Dr. Johnson, your office has seen a tremendous growth in terms of resources. I understand, however, that the President's budget would reduce funding for new grants for High-Risk Youth demonstrations. What is the purpose of this program and what kind of projects are currently funded?

Dr. Johnson: The High Risk Youth program is one of two OSAP client-oriented demonstration programs which focus primarily upon prevention and early intervention among populations at risk. The President's budget increases funding for this program from $39 million in 1990 to $45 million in 1991. Initiated during FY 1987, the program was originally designed to develop and/or test innovative strategies to minimize the occurrence of substance abuse problems among high risk youth. The program was expanded in FY 1989 to include the development of intervention models that diminish the risk factors for using alcohol and drugs as they impact on individual high risk youth and on the environment in which high risk youth and their families function.

The OSAP is currently funding 137 High Risk Youth grants located in both rural and urban areas. Projects are often community based programs. Prevention and intervention strategies employed by these programs include counseling and outreach services, community and family mobilization, education and information dissemination, treatment and rehabilitation, and job training.

Mr. Stokes: What is the amount of the reduction and what effect will it have on the new grants?

Dr. Goodwin: This program has increased from $26.5 million in FY 1989 to $44.7 million in the FY 1991 request, an increase of $18.2 million or almost a doubling in a two year period. Because of the large increases in the FY 1990 appropriation, the continuation cost make up the majority of the funding request in order to support 138 continuation grants. As a result, OSAP will support 18 new grants in FY 1991. Overall, we will be supporting 3 more grants in FY 1991 compared to the prior year and 47 more than we supported in FY 1989.

COMMUNITY YOUTH ACTIVITY PROGRAM

Mr. Stokes: Dr. Johnson, I understand that OSAP is supporting some community Youth Activity Projects in Ohio. What can you tell me about these grants?

Dr. Johnson: The Community Youth Activity Program is intended to establish innovative drug and alcohol prevention services primarily for youth who are not in school, are at risk of dropping out, or are involved with gangs. This program has three distinct components, each with its designated portion of appropriation funds: Projects of National Significance--5 percent; block grants to the states--25 percent; competitive state grants--balance.

During FY 1989, the State of Ohio was awarded a competitive grant which had two implementation sites: Cleveland and Cincinnati. The grant focused on a holistic service strategy with special emphasis on: 1) integrating social services and educational efforts in the schools; 2) providing youth with access to job opportunities; and 3) involving, motivating, and training parents in prevention activities. Ohio also was awarded a block grant in the amount of $68,509. Although none of the seven Programs of National Significance were awarded to organizations within Ohio, three of the programs have implementation sites within the State.

NIMH MINORITY FELLOWSHIP TRAINING PROGRAM

Mr. Stokes: Dr. Judd, in last year's house report, the committee urged NIMH to make an effort to help minority fellowship program participants receive support enabling them to complete their dissertation. What have you done about this?

Dr. Judd: In FY 1988 we provided supplements of $25,000 to each of the Minority Fellowship Training Programs which provide research training, i.e., the MFP's in Psychology, Nursing, Sociology, and Social Work. In FY 1990, we were able to increase the amount of funds provided to pay the higher stipends, $8,500 rather than $6,552 per trainee, and we were able to provide $25,000 for dissertation support in Psychology and Nursing, but not in Sociology and Social Work. In FY 1990, we plan to provide support of dissertation expenses for all of the programs. Our announcements for the MFP in Neuroscience and the new research MFP in Psychiatry also provide for funding dissertation expenses when these are requested by the applicant.

Mr. Stokes: Dr. Goodwin, Last year we discussed with both ADAMHA and NIH the disturbing trend of a decline in young scientists participating in NIMH research programs. This is especially significant since a rather large segment of current researchers in this area are over the age of 55. How large a problem is this and what are the long-term implications?

Dr. Goodwin: We are very much concerned about the fact that, from 1979 to 1987, the percent of ADAMHA Principal Investigators who are younger than 36 fell from 26 percent to 13 percent of our total pool, while the percent who are over age 55 rose from 11 percent to 18 percent. In fact, the entire age distribution of our investigator pool has shifted sharply upward, especially in the middle-aged years where the increase is about six years.

These findings indicate that the problem is not an excessively high rate of retirement of senior investigators, but rather a shortage of young investigators entering the research arena in adequate numbers. Left unchecked, this trend would result in a serious diminution of well-trained investigators. The post-World War II baby boom cohort on scientists will enter retirement in the next ten to twenty years. Since it takes from five to ten years of post-college education and experience to begin development of a skilled investigator, we are taking steps now to encourage young people to enter scientific careers and to embark on research on the addictive and mental disorders.

SERVICES RESEARCH VS. BASIC AND CLINICAL RESEARCH

Mr. Stokes: Dr. Judd, please tell us what is meant by the term "Services Research". How does it differ from basic and clinical research?

Dr. Judd: Services research examines the delivery of mental health care in everyday settings, to find ways to improve the effectiveness, efficiency, and equity of services. It takes the findings from basic and clinical research and applies them to the public health problem of improving services for individuals who have mental disorders.

Basic research investigates the fundamental processes of nature to find the underlying mechanisms that cause disorders. Clinical research examines the most accurate ways to diagnose specific disorders, like Schizophrenia or Bipolar disorder, and the most efficacious ways to treat them. One useful distinction is that investigations in clinical research use highly controlled conditions and well selected patients to study the efficacy of particular treatments; once this state-of-the-art standard of efficacy is set, services research studies the effectiveness of these proven treatments when they are used in average conditions with the broad range of individuals who are seen in the community. By finding ways to ensure that the effectiveness of treatment in the community matches the efficacy demonstrated in controlled clinical trials, services research aims to improve the overall quality of care.

Another aspect of services research is that it studies the organization and financing of services; for example, once we know how to treat particular disorders effectively, can we deliver the services in an efficient and economical way? This focus of research is especially important for people with severe, persistent disorders like Schizophrenia and Bipolar disorder, since they require a coordinated set of comprehensive services, including general medical and social services as well as mental health care.

To be sure that we are pursuing these vital research areas as vigorously as possible, NIMH has just issued a new research announcement inviting applications to study the effectiveness and outcome of mental health services. I have also asked several panels of experts in the field to help us examine the state of this field and develop a new National Plan of Research to Improve Care for Severe Mental Disorders. The initial draft reports for this plan are now being reviewed, and I expect the final plan to be ready by September, 1990.

SERVICES RESEARCH

Mr. Stokes: In what areas is NIMH conducting services research?

Dr. Judd: The NIMH gives priority to research on services for the approximately 2.5 million persons in the nation who suffer from severe, persistent, disabling mental illnesses that impact the full range of their lives and those around them. This research emphasizes studies of public sector mental health systems and services since these provide the bulk of care to this population. The NIMH also supports research on mental health services for emotionally disturbed children and adolescents, elderly persons, rural residents, minority group persons, homeless mentally ill persons, and persons with mental disorders that co-occur with alcohol and/or drug abuse disorders. The scope of the NIMH research program covers services provided in mental health, general health, and other organizational and informal settings.

The NIMH also seeks to link its services research activities as much as possible with those being conducted by State mental health agencies and other public sector organizations. Grants have been awarded to 36 States to improve their mental health statistics programs, and additional grants of this kind are planned. The NIMH has also awarded grants to 7 States to assist them in improving their capacities to conduct rigorous evaluation research on the effectiveness of their mental health services programs.

Mr. Stokes: What knowledge are we trying to gain with this research?

Dr. Judd: The goal of NIMH services research is to develop new scientific knowledge on ways to improve mental health care for the American people. Mental health services in this nation cost many billions of dollars annually, but are still guided more by intuition and trial and error than by the results of systematic research and evaluation.

Mental health services research is a relatively new field that focuses its attention on how services are organized, financed, and delivered at clinical and system levels. We believe that the field is now sufficiently advanced in concepts and methods to greatly enhance our understanding of how to organize and finance mental health services in more cost-effective and appropriate ways. Increasingly in coming years, we anticipate that the results of NIMH services research will lead to improvements in delivery of care, reductions in unnecessary disability and suffering, and better use of available resources though targeted financial and organizational strategies.

MINORITY INSTITUTIONS RESEARCH DEVELOPMENT PROGRAM

Mr. Stokes: Dr. Judd, last year you told the committee that NIMH would be starting its own MBRS program. What is the status of this program?

Dr. Judd: We have initiated our own program to assist minority institutions to develop research capacity and to fund individual investigator research projects. An announcement for the Minority Institutions Research Development Program (MIRDP) was issued in April, 1989 and applications from 13 institutions requesting support for over 70 individual projects are currently being reviewed. This is an open announcement with three receipt dates per year.

The MIRPD was developed after an external evaluation of NIMH supported MBRS projects and recommendations that an NIMH develop its own program in order to better assist minority institutions and minority investigators in developing research in mental health areas. We convened an advisory committee of MBRS and other minority researchers to discuss the recommendations and to advise us on what actions NIMH should take to improve research in minority institutions.

They recommended that we provide some support to develop institutional and individual research capacity as well as support individual research projects. The MIRDP announcement explicitly encourages the development of institutional research capacity, which is a new feature that was not a part of the MBRS program. In addition to supporting individual research projects, it will provide support for students as research assistants on NIMH or other funded mental health research projects.

The other two Institutes, NIAAA and NIDA, joined NIMH in support of the MIRDP announcement and consequently, all of ADAMHA's areas of research are eligible for MIRDP support.

We expect to fund a number of MIRDP projects this fiscal year.

Mr. Stokes: What is the status of MBRS grants that were co-funded with NIH? Have you continued to co-fund them?

Dr. Judd: We have continued to co-fund all NIMH projects at the level of our commitment throughout the life of the individual grants. Most grants are for 3 years and each year about one third of them end their period of commitment. We have and will continue to fully meet our commitments to co-fund particular projects.

Mr. Stokes: What is requested for the MBRS program in FY 1991 and how does this compare to FY 1990?

Dr. Judd: NIMH is requesting $1,100,000 to fund the MIRDP in FY 1991, which is NIMH's new program to replace and enhance our support of research in minority institutions and will fund continuation costs for the MBRS which total $120,000. In FY 1990, it is estimated that $1,471,000 will be provided to support MIRDP/MBRS programs.

MARC PROGRAM

Mr. Stokes: Dr. Judd, NIMH is the lead institute for the agency's MARC program. How much is requested for this program in FY 1991? How does this compare to FY 1990?

Dr. Judd: In FY 1989, three new MARC Honors Undergraduate Programs were begun at the University of New Mexico (American Indian focus), the University of Puerto Rico (Hispanic focus), and University of Hawaii (Native Hawaiian focus). The NIMH will increase the MARC program from $868,000 in FY 1990 to $916,000 in FY 1991 which is approximately 6 percent over FY 1990. The Agency total for FY 1991 is $1,196,000.

ADAMHA AIDS RESEARCH PRIORITIES

Mr. Stokes: What are your research priorities in the areas of AIDS for FY 1991?

Dr. Goodwin: The National Institute of Mental Health AIDS research program supports basic science research focusing on neuroscience, neuropsychiatric, and behavioral aspects of HIV infection and AIDS. Research training and health care provider training are also supported. Major areas of emphasis include: biomedical research, including studies of brain-immune interaction; neuroscience and neuropsychiatric research, including assessment of cognitive/neuropsychologic function, AIDS dementia complex, and development of therapeutic agents; behavioral research, including mechanisms of behavior and behavior change, behavioral interventions, pharmacologic interventions, and multi-site, multi-population prevention strategies; research enhancement, including research training; risk assessment and prevention, including research on natural history and co-factors and technical assistance on counseling, testing, and partner notification within population-based research on natural history, transmission, and risk factors; health care worker and provider training; and mental health services research within clinical health services research and delivery.

Special emphasis will be given in FY 1991 to (1) expand and disseminate the neuropsychological assessment battery to measure cognitive dysfunction associated with HIV infection in children and adults, (2) develop the multi-site, multi-population study of AIDS prevention approaches, (3) expand research efforts related to central nervous system effects in pediatric AIDS, (4) strengthen investigation of brain-immune interactions as they relate to progression of HIV disease, and (5) advance research on the development of therapeutic agents for HIV disease in the brain.

The NIMH AIDS program is engaged in a series of efforts to increase the number of successful applications submitted by minority investigators. A research seminar/workshop is being developed to provide technical assistance to minority investigators of develop research applications related to HIV infection and AIDS.

The highest priority of the National Institute on Drug Abuse AIDS research program is to reduce transmission of HIV infection associated with drug abuse. Under this priority, NIDA is working to (1) improve the effectiveness of drug abuse treatment and prevention as a primary HIV/AIDS control strategy, (2) develop alternative control strategies for drug users who are not attracted to or successful in drug abuse treatment, (3) expand the scientific knowledge base to better understand the nature and extent of HIV/AIDS risk behaviors and HIV infection associated with drug abuse, and (4) disseminate research findings to at-risk groups and individuals working in the drug abuse and HIV/AIDS fields.

Consistent with these priorities, NIDA will initiate basic and clinical studies to examine the immunologic effects of drugs of abuse and medications used in the treatment of drug abuse. NIDA's treatment compliance efforts will include expanded research on the behavioral factors contributing to intravenous drug use and its associated behaviors (e.g., needle sharing). Research will be expanded to investigate factors that are associated with the transition from non-intravenous to intravenous use of drugs; initiation of high risk sexual behaviors; and the relationship of perceptions of personal risk with drug use and sexual behaviors among adolescents.

The National Institute of Alcoholism and Alcohol Abuse will expand its research efforts in its examination of alcohol's effects on fetal development, alcohol as a cofactor on the acquisition of HIV infection by the fetus, and its possible role in increasing susceptibility to other infections on HIV neonates. NIAAA will initiate studies in the biological and molecular mechanisms underlying the effect of alcohol on the immune system in correlation with susceptibility to HIV infection and progression of disease.

Mr. Stokes: The number of new and competing research grants at ADAMHA for AIDS would be reduced by 36 percent under the President's budget. What effect will this have on the AIDS research effort? What level of funding is needed to maintain current services? What is the professional judgement level?

Dr. Goodwin: The FY 1991 President's Budget proposes an increase of over $31 million above the FY 1990 appropriation. Use of the numbers of new and competing project grants as a measure of commitment can be misleading. While funding for research project grants increase by nearly $17 million in FY 1991, the number of new and competing projects goes down because of the large number of new awards funded in FY 1990 with continuation costs in FY 1991. In fact the total number of project grants goes up from 280 to 330 in FY 1991.

MENTAL HEALTH SERVICES FOR HIV-INFECTED PERSONS AND THEIR FAMILIES

Mr. Stokes: Does ADAMHA support a program of mental health services for persons with HIV infection, their families?

Dr. Goodwin: ADAMHA does not support a program of mental health services for persons with HIV infection and their families. NIMH supports research to determine the most effective structure and process of mental health services for individuals who develop mental disorders subsequent to HIV infection or AIDS. Clinical research is also being supported to elucidate the course, treatment, and prevention of HIV-related mental disorders.

Research is underway to determine rates and determinants of HIV infection among the severely mentally ill who may be at increased risk for acquiring HIV infection. At a meeting in January 1990, NIMH convened 11 mental health organizations to consider policies and practices related to the mentally ill and HIV infection. Meeting participants addressed issues of HIV testing, confidentiality, access to services, and management of mental health care.

NEW AND COMPETING RESEARCH PROJECT GRANTS

Mr. Early: While the overall number of Research Project Grants would remain approximately the same in FY 1991 and FY 1990, the number of new and competing grants drops significantly (278 in FY 1991 vs. 404 and 390 in FY 1990 and 1989, respectively). What impact will this have on the momentum of your research program? What program areas will be affected?

Dr. Goodwin: While the number of new and competing research project grants declines from 1990 to 1991, funding is at an all time high for all research project grants. The decrease in the number of new and competing grants is a result of providing more continuation grants. It should be noted that one reason for the decline in the number of competing project grants is the emphasis that NIDA is placing on medications development and data collection. Major portions of these programs consist of directed research, i.e., the collection of a specified set of information on a particular drug abusing population. Research of this type is more appropriately supported through contracts or cooperative agreements than project grants.

Fluctuations in funding for research may have a negative impact on the research community. Our inability to assure the field of stable levels of support may well result in our not being able to draw new and scientifically competent researchers into the alcohol, drug abuse and mental health fields. This, of course, could slow down progress towards adding to the existing body of knowledge on how to treat individuals suffering from these three disease areas.

BRAIN RESOURCE ACQUISITION AND INFORMATION NETWORK

Mr. Early: The justification indicates that NIMH plans to initiate a Brain Resource Acquisition and Information Network (BRAIN) this year. Tell us a little about this project. What is the status? How much has been allocated for this project in FY 1990 and FY 1991?

Dr. Judd: With recent dramatic advances in the study of human brain function, it has become increasingly apparent that there is a shortage of post-mortem brain tissue available for neuroscientific investigations. To respond to this need, the NIMH is developing a Brain Resources Acquisition and Information Network (BRAIN) to coordinate and facilitate the post-mortem collection and storage of brain tissue from patients with schizophrenia and other major psychiatric disorders, as well as tissue from normal individuals.

To identify existing problems and develop solutions, the NIMH sponsored a BRAIN workshop in February 1990 that brought together a wide range of internationally recognized brain researchers, many of whom have already established "banks" for brain tissue storage. This group generated a number of creative suggestions to enhance brain tissue collection nationwide. Through advertising, articles, and editorials in both the lay literature and professional journals, an effort will be made to stimulate awareness of the need for tissue and to clarify the practical, legal, and ethical issues in brain tissue collection. To facilitate tissue donation, this group recommended that a centralized tissue registry be developed that would direct interested parties toward the appropriate regional brain bank. These scientists also requested that NIMH assist in establishing a standardized tissue collection procedure and a common evaluation instrument for post-mortem psychiatric diagnoses that all brain tissue centers could use to enhance compatibility between their collections. It was pointed out that selective funding of neuropathologists to work with medical examiners in large cities and with existing brain banks could greatly facilitate the donation of brain tissue collection from multiple diagnostic groups and normal control subjects. Similarly, the group identified the need to fund additional training in neuropathology for existing clinical researchers who might then focus more on the collection and study of brain tissue.

Funding for this project in 1990 focused on conducting this BRAIN workshop. It is hoped that funding in 1991 could support the pilot projects as described above including establishment of the centralized tissue registry, development of standardized autopsy procedures and diagnostic instruments, establishment of positions for neuropathologists to work with medical examiners and existing brain banks via supplements to current grants, and a pilot project to provide neuropathology training to a clinical researcher, for a total of about $400,000.

NATIONAL PLAN FOR RESEARCH ON CHILD AND ADOLESCENT MENTAL DISORDERS

Mr. Early: I understand that the Institute has also developed a National Plan on Research in Child and Adolescent Mental Disorders. Would you briefly summarize the major elements of this National Plan?

What was the impetus for the development of this plan?

Dr. Judd: The National Plan for Research on Child and Adolescent Mental Disorders was developed because the mental disorders of childhood and adolescence are among the most devastating and least understood diseases of humankind. The research in this area has lagged behind comparable research on adult disorders. Under this plan, major new research initiatives are being developed to increase the understanding of the causes and determinants of child and adolescent psychopathology; determine the effectiveness of biologic, psychotherapeutic, and social treatments; develop more effective service delivery systems; and enlarge our cadre of qualified, committed researchers.

This plan entails increasing significantly the number of clinical and neuroscience research centers focusing on various aspects of child and adolescent mental disorders (e.g., developmental neurobiology, genetic studies of the severe mental disorders of childhood, suicide in children and adolescents, psychopharmacologic treatment study centers, etc.); a provision of financial and scientific support for the career development of 90 additional child and adolescent mental health researchers; the creation and funding of 25 institutional training projects across the nation to train future researchers; and substantial increases in the number of individual grants awarded to qualified investigators.

In FY 1991 the President's Budget includes $111.9 million for the National Plan for Research on Child and Adolescent Disorders.

COMPUTER APPLICATIONS IN NEUROSCIENCE

Mr. Early: Bring us up to date on the grant program you recently initiated to support research on computer applications in neuroscience.

Dr. Judd: The Mathematical/Computational/Theoretical Program Announcement was issued in October of 1988. Its purpose was to encourage the development of quantitative approaches and theory in the neurosciences because new mathematical and computational methods have become available and may be the best route to understanding complex processes such as behavior. This announcement has been highly successful, resulting in 76 applications; 54 of these have been reviewed and approximately 5 of the best research applications will be funded. Among these are pioneers of this field including, David Rumelhart and Terry Sejnowski who are leaders in the development of neural network theory, Walter Freeman who has been demonstrating that chaos is critical for neural information processing, and Stephen Grossberg, who has been developing theoretical models based on a dynamical systems approach to account for brain function. These applications could provide a breakthrough in understanding brain functions and are necessary to maintain the American lead against impressive funding for this area in Japan and Europe.

We are considering a separate fund for basic development of advanced technology for the neurosciences to provide the hardware, software, and equipment needed to make rapid progress. Some examples of needed resources are: 1) Massively parallel computer and software development combined with active biological modelling, 2) Multi-electrode neuron recording and modelling, 3) Development of brain imaging hardware and software to complement the Imaging Centers, 4) Development of computer chips to performs specialized brain-like computations, 5) Biocompatible materials development.

MEDICATIONS FOR TREATING MENTAL DISORDERS

Mr. Early: Have there been any recent advances in medications for treating mental disorders?

Dr. Judd: There have been a number of recent medication advances in the treatment of the severe mental disorders including the introduction of Fluoxetine (Prozac), Clomipramine (Anafranil) and clozapine (Clozaril). Fluoxetine or prozac is a serotonin re-uptake inhibitor which has been approved by the FDA for the treatment of depression. Prozac represents an advance over both the tricyclic antidepressants (TCAs) and the monoamine oxidase inhibitors(MAOIs) because of its reduced side effect profile. Prozac does not have the anticholinergic properties(dry mouth, blurred vision, constipation et al.) nor potential cardiotoxicity that has been associated with both the TCAs and MAOIs. A second advantage of prozac is that the starting dosage range of 20 milligrams per day, unlike TCAs and the MAOIs which require the upward titration of the medication to reach the therapeutic range, falls within the effective therapeutic range for its antidepressant actions. Therefore, Prozac not only has a superior side effect profile but is also much easier to titrate than previous antidepressant agents. another remarkable feature of prozac are the results of a series of preliminary studies which demonstrate that prozac may also be useful for treating certain individuals with obsessive compulsive disorders panic disorder, and border line personalities disorder. Further clinical trials to test the efficacy of prozac in these other disorders are needed,however, this preliminary evidence is quite promising.

A second agent that has been recently introduced in the United States is Clomipramine or Anafranil. Clomipramine, a chlorinated derivative of the tricyclic antidepressant imipramine, was recently approved in the United States as a specific treatment for obsessive compulsive disorder. Studies of Clomipramine done in the United States have demonstrated its efficacy in treatment of patients suffering from obsessive compulsive disorder and variant of this disorder including trichotillomania (which is a disorder where individuals have a compulsion to pull out their hair). Further investigation of longitudinal the efficacy of clomipramine is necessary, however, both short and intermediate studies indicate that clomipramine is an effective treatment for obsessive compulsive disorder.

The third major medication advance that has occurred recently was the introduction of clozapine (clozaril) in the United States. Clozapine is an atypical antipsychotic agent which has been demonstrated to be effected in approximately 30 percent of treatment refractory schizophrenia patients. These are patients who had not been able to have relief from symptoms of psychosis despite adequate medication trials with at least two different types of conventional antipsychotic agents. Clozapine is also unique because patients taking clozapine do not seem to be at risk of developing tardive dyskinesia, a movement disorder which is frequently a side effect of neuroleptic medication exposure. In fact, some preliminary studies imply that clozapine might be useful in treating patients who have developed tardive dyskinesia while on other antipsychotic medications. There is a need for further long-term investigation of the efficacy of clozapine and also studies of the utility of using clozapine with individuals who suffer from movement disorders such as tardive dyskinesia.

The discovery by intramural investigators in the Biological Psychiatry Branch that the anticonvulsant drug carbamazepine could prevent or reverse kindling in animals led directly to a successful trial in rapidly cycling manic depressive patients. The initial double-blind studies of carbamazepine in acute mania have now been widely replicated in 13 additional controlled studies throughout the world.

Carbamazepine is an effective prophylactic treatment for recurrent manic and depressive disorders; it thus provides an alternative to lithium. Preliminary evidence suggests that there are differential predictors of the clinical response to lithium and carbamazepine; the same variables that are associated with poor response to lithium (i.e., severity of mania, dysphoric mania, rapid cycling, and a negative family history for affective illness in first-degree relatives) may be associated with a good response to carbamazepine.

Intramural scientists pioneered treatment of attention deficit disorder/hyperactivity (ADDH) with Ritalin (methylphenidate). Treatment of hyperactive children indicates that the two stimulants, methylphenidate and dextroamphetamine may benefit populations that largely, but not completely, overlap. Methylphenidate appears more efficacious in improving motor restlessness, while dextroamphetamine may be clinically more comprehensive in use.

In summary there have been a number of recent advances in the psychopharmacology of serious mental disorders. The introduction into clinical practice of fluoxetine or prozac, clomipramine or anafranil, and clozapine or clozaril open up new treatment horizons. These advances facilitate not only treatment but also the investigation of complex neurotransmitter interactions that may be occurring in these disorders These medications advocates may elucidate the underlying pathophysiological mechanisms involved in this disease. However, the immediate utility of these agents in clinical practice has directly benefited approximately 6 to 8 million Americans.

FUTURE SUPPLY OF RESEARCH SCIENTISTS

Mr. Early: How would you assess the current situation regarding the supply of research scientists in fields of concern to your Institute? Are there any areas of particularly concern? What steps are you taking to address this situation?

Dr. Judd: The question deals with one of the most important problems facing the future of mental health research. The current research cadre is aging, the mean age of our investigators has been increasing at a rapid rate over the past ten years. Approximately 20 percent of the agency's scientists are over the age 55 and scientists under age 36 are only half the proportion they were eight years ago. Less than 150 physicians are being supported in research training by NIMH. It is clear that ADAMHA and NIMH together must implement major efforts to recruit young scientists (both physicians and Ph.D.s) to not only replace this aging population, but to also allow growth in this important research field. We feel that our research training budget should keep pace with our research budget, but it has been lagging behind.

Our fields of greatest concern involve clinical research, in particular physician researchers. We have a great need for additional physician scientists trained in research on child and adolescent disorders, schizophrenia, aging, and affective disorders.

In addition, the new area of prevention research is starting from baseline and represents a whole new area for research training.

Some of the efforts we have already begun should bear results very quickly and others are expected to work over a longer span of time. We expect the following actions to have an immediate effect on encouraging young investigators to enter this research area:

The Mental Health Academic Awards in Clinical Research awards are designed to facilitate the development of young psychiatrists and nurses as mental health academic researchers.

Scientist Development Award for Clinicians (SDAC) is a new award designed to support clinically trained (psychologists, psychiatrists, nurses, and social workers) individuals in the development of excellent research skills to bring them into full-time research careers.

The Scientist Development Award is another new ADAMHA award provides five years of support to highly promising developing scientists while they acquire further, new or more specialized research skills. A three year award is available for established ADAMHA investigators who wish to expand their research skills or investigators from other areas who wish to enter ADAMHA research. We expect that this award will facilitate the advanced research training of basic scientists interested in mental health research and provide a mechanism for established scientists from other areas to learn to apply their skills to mental health research.

Stipends - We feel that the current stipends for training grants, fellowships and development awards are a disincentive to young people considering a research career. To that end, we have announced an increase in the stipend for our development awards (to begin in 1990).

Extramural Staff Fellowships - The NIMH has just announced this program which provides an opportunity for non-federal scientists to spend a year working in the NIMH intramural laboratories in Bethesda and St. Elizabeths Hospital. These fellowships will bring about a closer relationship between the Institute's intra- and extramural research programs and in many instances involve extramural basic scientists in clinically relevant research.

Outreach Programs - NIMH staff have organized workshops at professional meetings, published papers, presented talks at universities, hospitals and professional meetings to inform the field of the research training and development opportunities offered by NIMH.

We have implemented the following activities so as to increase long term attraction of research personnel into mental health research:

1. M.D./Ph.D. Fellowship - ADAMHA has just announced a new training fellowship to support potential physician/scientists through a

combined medical/scientific training program which, in the long term will attract young investigators into mental health research. The fellowship provides the same opportunities and benefits as the NIH Medical Sciences Training Program but in the form of an individual fellowship. It is open to any applicant accepted in a formal M.D./Ph.D. program at a U.S. medical school. The fellowship supports Ph.D. training in any scientific discipline however, the applicant and sponsor must indicate how that training will ultimately apply to mental health research areas. We see this as an exciting new fellowship which will enable many scientifically oriented medical students to focus on ADAMHA related research goals very early in their careers and ultimately increase the number of physician scientists in these disciplines.

2. Short Term Medical Student Training - This mechanism has been available to ADAMHA for a number of years but it has been unused and we are now in the process of revitalizing it. It will be especially helpful in drawing young investigators into mental health research. Research training grants are awarded to medical schools to provide summer, semester, or full year research training opportunities for appropriate medical students.

3. The future supply of research scientists in mental health areas of research is of major concern to me and we have taken a number of steps to address the situation. We continue to have a shortage of trained researchers in mental health services research and in child abuse, spouse abuse, and the prediction and control of violent behavior. These are areas which require multidisciplinary approaches which do not fit neatly within any one discipline. NIMH support for this kind of multidisciplinary training is critical.

The need to increase stipends to meet some of the costs of inflation has resulted in a decrease in the number of persons that can be trained; in mental health services research the number declined from 107 to 75 as a result of the need to increase stipends last year. But even with the increase to $8,500, our stipends are far below the $12,300 provided by NSF. We need to be competitive in funding research training.

Actions we have taken include a special letter encouraging career development awards in mental health services research that resulted in 8 new awards, including 4 to psychiatrists. Previously, there had been only one award in this area.

The training of physician researchers continues to be a major concern and it is being addressed by a new announcement for Research Scientist Development for Clinicians which provides more attractive salary support and research expenses and training funds. These awards are supported by research funds, rather than research training funds.

The shortage of minority researchers is being addressed by the initiation of Minority Fellowship Programs for research training in Psychiatry and increased funding of the other 5 programs is

Neuroscience, Psychology, Nursing, Social Work, and Sociology. Three new Minority Honors Undergraduate Programs for research careers were begun last year. We also initiated a new Minority Institution Research Development Program which will involve minority students as research assistants; We also initiated a new program of supplements to regular research grants to involve underrepresented minority undergraduates, graduate students, and postgraduate persons in ADAMHA supported research.

NIDA MEDICATIONS DEVELOPMENT

Mr. Early: Has any progress been made in developing new medications for drug abuse treatment?

Dr. Schuster: Yes. The Addiction Research Center has identified the calcium channel antagonist nifedipine as having possible value as a cocaine antagonist. We are also testing the efficacy of the marketed drug carbamazepine in the treatment of cocaine dependence. Additionally, several agents which may compete with cocaine for its binding site in brain have been discovered. D-1 dopamine antagonists have been shown to reduce the ability of monkeys to choose cocaine over a placebo injection. This suggests that this class of drugs may be useful for treating cocaine addicts.

We will test the effect of a serotonin antagonist (gepirone) on cocaine ingestion by cocaine addicts. Other evidence suggests that certain other serotonin antagonists (5-HT3 antagonists) may modulate the dopamine reward system, the same system that is disrupted by cocaine. These agents also hold promise and will be tested further in animal models.

We are testing the effects of buprenorphine, a partial agonist, on the intake of narcotics in opiate dependent persons at the ARC and Yale. We have developed a depot formulation of naltrexone which will go into clinical trials in 1991.

Mr. Early: I understand you plan to establish a new division to coordinate all medication development program activities. What is the rationale for this decision and what do you hope to accomplish?

Dr. Schuster: When the medications program was being formed, the strategy was to develop a multi-pronged approach to facilitating the development of medications for drug abuse. This included a plan to engage the pharmaceutical industry in the effort. This concept involved consultation on clinical trial design and possible co-development of drug products. We also planned to develop an intrinsic capacity to develop a medication from the "bench through Phase II clinical testing". Moreover, we planned to closely interact with the FDA. As we were beginning to work through some of these plans, Dr. Goodwin, the ADAMHA Administrator, expanded the scope of the program to encompass the mental and addictive disorders. In discussions with Dr. Goodwin, it became clear that a division dedicated to medications development would be necessary to carry out all the tasks involved in medications development. The Division was established in March 1990.

TREATMENT OF COCAINE ADDICTION

Mr. Early: The budget justification notes the virtual absence of proven means for treating the scourge of cocaine addiction. Why hasn't there been any progress in this area?

Dr. Schuster: Cocaine addiction is not a new disease, but until the 1980s it was not recognized as a major public health and social problem, certainly not of the magnitude that the US has recently experienced. As a consequence of the explosive pattern of abuse, we are in a "catch-up" mode in terms of developing pharmacological and other treatments.

There are several reasons for this state of affairs. Research on cocaine addiction and its treatment is a relatively new phenomenon. It was only with the concept of the brain reward pathway that researchers began to understand the powerful hold cocaine has over its users. While a fair amount of physiological chemistry was known about opiates and other drugs of abuse, little was known about cocaine. And so, just a short time ago, a concerted research effort began. Researchers are still being recruited into this area of research, with clinical researchers being especially sought.

The pharmaceutical industry has also been slow to respond to the problem of treatments for drug addiction in general and cocaine addiction in particular. We have been especially active in encouraging the industry to work on treatments for cocaine addiction. Another reason for the perceived absence of progress is that drug development is inherently a slow process. It usually takes 7 to 11 years for a drug to proceed through all the phases of development, testing, and review by the FDA.

NIDA PREVENTION RESEARCH CENTER FOR HIGH RISK YOUTH

Mr. Early: NIDA plans to establish a new research center for prevention research with a special emphasis on high risk youth. Why is this center necessary and what do you hope to accomplish?

Dr. Schuster: NIDA is planning a new minority drug abuse prevention research center to improve our understanding of etiologic factors, to develop criteria and early identification methods for children and high-risk adolescents, to design and test preventive interventions, to assess the progression of drug abuse, and to train minority researchers. NIDA will work with the Office of Substance Abuse Prevention (OSAP) on this project. Research suggests that early identification of high-risk children may signal an appropriate time for preventive intervention. As problems develop with time, preventive intervention becomes more difficult. Centers, with their collective expertise, offer multi-faceted approaches to the complex problems of the etiology of and intervention in drug abuse.

NIDA RESEARCH TRAINING AND RESEARCH CAREER PROGRAM

Mr. Early: The budget request includes a major expansion in NIDA's research training and research career program? Why is this increase necessary and what fields will this expansion focus on?

Dr. Schuster: The FY 1991 budget is requesting support for an increase in the number of NRSA trainees over those supported in FY 1990. During fiscal year 1990, there will be an increase in the number of research institutional training grants in the field of drug abuse in two areas, AIDS and clinical research. Although there has been a large growth in drug abuse research over the past few years, in 1990 the number of trainees has been increased but still does not compare with the level of other ADAMHA or NIH Institutes.

There is a critical need to expand the number of qualified researchers in the drug abuse field considering the tremendous number of research opportunities present and the profound public health problems drug abuse presents. Treatment, prevention, AIDS, and neurobiology are all areas wanting in qualified researchers. The number of trainees supported is still very small in comparison to the increased needs for researchers in these fields.

NIDA needs to increase research training to assure a sufficient cadre of future researchers to accomplish the following goals: (1) to improve methodologies for clinical treatment; (a) to enhance physician and clinical treatment for drug abusers - especially those dependent on substances other than opiates; (b) to increase the preclinical knowledge base to provide tools for the clinician; (2) to use newly developed neuroscience techniques and advances to understand the manifestation of drug action and the potential intervention of drugs and other treatment strategies; (3) to improve social scientists ability to understand how drugs of abuse are accepted and how norms can be changed to limit drug use; (4) to measure the epidemiology of drugs of abuse and associated problems of crime, delinquency and familial problems; (5) to develop and adapt molecular biology approaches in areas from model studies of the receptor to drug modification and treatment in humans; (6) to understand the interrelationships of drug dependency and the associated problem of AIDS; (7) to develop a new breed of scientists who can use multiple disciplinary approaches (e.g. immunology, drug dependence, neonatology, neuroendocrine, molecular biology) to solve drug problems; (8) to increase training and participation of minorities to ensure that an increased number of minority researchers is available to work in the drug abuse research field; and (9) to increase the support of NIDA center programs, so that these bright and diversified scientists can provide leadership for the development of all the above areas.

NIAAA'S EFFORT ON THE DECADE OF THE BRAIN

Mr. Early: One of the most exciting areas in biomedical research today is the area of neuroscience. The 1990s have been declared the decade of the brain, and this has generated a great deal of public interest. What kind of work is NIAAA doing in this area?

I understand that there are new neuroimaging technologies that NIAAA-supported investigators and your intramural scientists are using. Tell us a little about this.

Dr. Gordis: The two most common organic brain syndromes caused by alcoholism, which are second only to Alzheimer's disease as a cause of chronic organic brain disorders expressed as dementia, are alcoholic dementia and Korsakoff's psychosis. NIAAA Intramural scientists have been conducting studies to characterize memory deficits and to develop possible pharmacologic interventions for Korsakoff patients. One result of these studies is the discovery that the drug fluvoxamine can improve certain aspects of memory loss in Korsakoff patients. The finding that the drug can improve memory functions in Korsakoff patients suggests that serotonin deficiency may play a role in the severe amnesia that characterizes this syndrome.

A promising new approach to brain imaging -- nuclear magnetic resonance (NMR) spectroscopy -- is also being explored by Intramural scientists for application in studies on alcohol's effects on the brain. Ability to monitor brain metabolism with this sophisticated and highly sensitive method could be very useful both for assessing new therapies and for tailoring treatment to the responses of individual patients.

Three-dimensional reconstruction of PET and MRI, into integrated images, has also become a reality. Non-invasive NMR methods for monitoring brain-blood flow have been developed, and initial efforts at mathematically relating the three-dimensional CAT scans, with simultaneously monitored EEG information, have been undertaken. Analysis of brain structure and function in alcoholics and in individuals genetically predisposed to alcoholism has been instituted. Neurochemical studies with animals and humans, and electrophysiologic studies in humans, have provided clear direction for fruitful analysis using neuroimaging technology. For instance, ERP studies in alcoholics and young male offspring of alcoholics, have demonstrated inherent differences in the late component of the evoked response. But due to distortion of electrical potential derived from deep within the brain, the exact locations and character of differences are difficult to assess with EEG techniques. Magnetoencephalography (MEG) is a recently developed technique which exploits advances in low temperature physics. We are hopeful that this technology will become available to the NIAAA IRP in the near future and that we can use MEG to non-invasively measure ionic current generators which are integrated in the ERP measures. This technology will add important information to our analysis of brain structure and function.

NIAAA Intramural scientists are attempting to identify specific genes whose expression in brain might determine genetic susceptibility to alcoholism. A major focus of this study is genes associated with the synthesis and functions of serotonin, a neurotransmitter that appears to be involved in a highly heritable type of early-onset alcoholism in which behavioral traits of aggression, impulsivity, and antisocial behavior are prominent. The significance of this study is its potential to bridge the gap between behavioral phenomena (compulsive drinking, aggression, impulsivity) and molecular variations in the genes.

Intramural researchers are also studying neurotransmitter-receptor systems that appear to be especially vulnerable to alcohol exposure, and have found that alcohol has a significant effect on brain chemical systems linked to NMDA receptors for the neurotransmitter glutamate and related compounds. The finding that alcohol diminishes the responsiveness of NMDA receptors may be relevant to a number of phenomena associated with memory impairment arising from alcohol exposure.

Intramural scientists have also found evidence that vasopressin, a hormone produced in the pituitary gland, plays an important role in the development of alcohol tolerance by influencing brain biochemical systems involved in neurotransmission and, ultimately, learning and memory. Further research of vasopressin is critically important for understanding how alcoholism develops.

SCIENCE EDUCATION

Mr. Early: Doctor, we keep reading that science education in this country is not what it should be. What impact is the decline of science education having on your agency's programs? What implication does this have for the future?

Dr. Goodwin: The media are full of stories about the decline in our educational standards and the difficulties American students will have in the global economy if the tide is not turned. Science education is no different. The challenge from our point of view is twofold: better science education will interest more students in scientific careers, and it will ensure that the brightest students take up the challenge science has to offer. Science requirer a love of investigation, exploration of the unknown, and search for the truth. Unless we can get our students to see how exciting this can be at an early age, they will miss out on one of the most rewarding careers in which to engage their minds. And the effect will be a devastating impact on our quality of life and our economic health.

Better teachers, who are fully prepared to explain the concepts of science and fire the imaginations of our students, are one way we can change this dreary picture. At ADAMHA we intend to undertake a pilot program to invite some high school science teachers to spend the summer in our intramural labs. There they will be exposed to the newest techniques and theories about biomedical research and its link to discoveries that change the ways we treat and prevent mental and addictive disorders. We are looking forward to this opportunity with enthusiasm.

ROLE OF RESEARCH ON THE "WAR ON DRUGS"

Mr. Early: Dr. Goodwin, what do you think the role of research should be in the "War on Drugs"?

Dr. Goodwin: Research holds the long term solution for treatment and prevention. The federal role must be to prioritize and focus resources on research that is most likely to result in better drug abuse prevention and treatment. Others do very little in the area of addictive disorders despite the fact that private drug companies and foundations are often a source of support for investigations into other diseases. But since their support is virtually nonexistent for addiction, it is critical that the government maintain a stable research base in this field.

We also have a leadership role to play in translating research results into clinical practice. In ADAMHA we have established the Office for Substance Abuse Prevention and the Office for Treatment Improvement to facilitate the transfer of our research findings to the community. We want to make sure that treatment and prevention services are based on the best knowledge we have about what works.

Treatment should be delivered by local systems which are supported by a variety of sources especially States, private insurers, and other Federal programs. Such programs are better able to respond to changing conditions, such as a new route of drug administration.

CRACK COCAINE

Mr. Early: Two years ago we didn't see the terrible impact that crack cocaine would have on young women. That was something we weren't prepared for. And now we see the awful consequences of that drug on their babies and older children. How much flexibility do you have, Dr. Goodwin, to respond to emerging crises in the drug area?

Dr. Goodwin: It is very important to maintain flexibility in dealing with this epidemic. It is difficult for the states to respond to varied local conditions when there are too many constraints put on the federal funds being given them to attack the problem. For example, there was a requirement put into the block grant legislation that a large portion of the money each state got for drug abuse be used for IV drug abusers. This seemed to be a sensible move when we saw that HIV was being transmitted by IV drug abusers. But immediately after that, the crack epidemic hit, and in most areas, states had more crack addicts to treat than IV drug abusers.

States have numerous restrictions on their ability to spend the ADMS block grant funds. Most of them are reasonable at the aggregate level, but can be difficult for local administration of these dollars. States must spend certain monies on women, on prevention, on loan funds, and on IV drug abuse. Local needs are diverse. This may not be the best way to ensure that federal programs reach the most important populations and address the most important local problems. We can demand accountability through state plans for use of the block grant funds, without prescribing programs which may not be appropriate for local conditions.

Most of our prevention and treatment demonstration programs are targeted to certain populations such as residents of public housing projects, pregnant women, etc. This limits our ability to conduct demonstrations of treatment or prevention services that may not be designed for those particular groups, but still have a place in the community.

Research has always been most successful when scientists are free to follow the leads--often unexpected--that appear before them. Preconceived notions get in the way of success. And the same idea can be applied to our demonstration and service programs. In order to be successful they must have a measure of flexibility to meet unexpected needs.

"ICE"

Mr. Early: What can you tell us, or what do we know about "ice", Dr.? I understand that it could become as serious, if not more serious, a problem than crack cocaine. Is NIDA doing any research on "ice"?

Dr. Schuster: "Ice" is believed to be methamphetamine (METH) in free base form. On heating in a pipe or in a cigarette the vapor can be inhaled, and is quickly absorbed from the lungs, producing a crack cocaine-like "high." The methamphetamine high, however, lasts longer. In the late 1960s we had an epidemic of methamphetamine (speed, crystal) abuse, although at that time the primary route of administration was by injection.

A clear danger of methamphetamine use is that in high doses, such as those used by human amphetamine abusers, the amphetamine-type drugs can lead to a psychotic state which has paranoid delusional symptoms that are very often indistinguishable from an acute psychotic episode seen in patients with paranoid schizophrenia. In addition, it is now clear that amphetamine-type drugs are neurotoxic. The generality of this finding in experimental animals leads us to believe that similar neurotoxicity can also occur in man, although there is no direct evidence available as yet from humans. Both substances produce similar toxicity to the cardiovascular system, and either substance is known to damage blood vessels in the brains of abusers, which sometimes leads to death.

Ice produces effects that are very similar to those of crack cocaine, but it is not chemically related to cocaine, and it works by a different mechanism--methamphetamine primarily releases a chemical messenger called dopamine from nerve cells, whereas cocaine primarily prevents the re-uptake of dopamine. The result of either action is to increase the level of dopamine, which causes excessive stimulation of the reward centers of the brain, reported by the user as a feeling of euphoria. Neither of these drugs imposes limits on its own intake, and use of either leads to further use. As a result, addicts characteristically go on binges during which large amounts of drug are used in relatively short periods of time.

The habit of smoking "ice", as well as some of the drug itself, comes from the Far East, and is entering the US by way of Hawaii, where its use already seems to be widespread. A methamphetamine epidemic is not unlikely because (1) smoked methamphetamine's effects last for hours, while cocaine's last only minutes, (2) "ice" is easy to synthesize, while cocaine has to be imported as a natural substance, and (3) drug addicts tend to seek "new" things to try. NIDA has conducted three field investigations of the use of methamphetamine in Hawaii.

NIDA has had a longstanding research effort designed to understand the addictive properties of amphetamines. In 1988, NIDA held a Technical Review to review current knowledge and survey current research and results on this topic (Publication # 94 of NIDA Research Monographs).

Many of the resources devoted to the study of amphetamine were redirected to the study of cocaine over the past 5-10 years. The increasing popularity of "ice" will require another shift, as we again refocus some of our research efforts to the problems of abuse of methamphetamine. The extent to which we can do this will in part depend on the resources available.

We are hopeful, however, that at least some of the treatments devised for cocaine addiction may be useful for methamphetamine addiction as well.

CRACK BABIES

Mr. Dwyer: We have read a great deal in recent years about "crack babies," babies born addicted to crack cocaine, although there are also babies born addicted to other drugs. These children have a variety of physical problems and developmental difficulties and may require medical and remedial assistance for many years.

It was my understanding that withdrawing a pregnant woman from her addiction was felt by the medical community to be too risky, but in light of the "crack baby" epidemic this position is being reevaluated. What efforts are being made to develop an effective withdrawal program for pregnant women?

Dr. Schuster: Research and clinical experience has indicated that pregnant women can be withdrawn immediately from cocaine without risk of harm to the fetus. While pregnant opiate abusers must be withdrawn slowly to prevent withdrawal effects in both the woman and the fetus, pregnant cocaine abusers can be withdrawn immediately. Cocaine is not physically addicting in the same way that opiates are and the addict withdrawing from prolonged cocaine use does not experience the well known physiological withdrawal syndrome of opiate addiction. Recent studies have shown that women who use cocaine in only the first trimester of pregnancy have better obstetric outcomes (decreased rate of premature delivery, abruptio placentae, and intrauterine growth retardation) compared with women who use cocaine throughout pregnancy. It is, therefore, important to terminate a pregnant woman's cocaine use as quickly as possible.

Mr. Dwyer: What are the initial treatments for "crack babies"? What efforts are underway to train neonatal nurses and other health care professionals to treat crack babies?

Dr. Goodwin: Since obstetrical and neonatal effects such as spontaneous abortions, premature delivery, low birth weight infants, small for gestational age, neurodevelopmental defects (impaired memory, intelligence, and motor coordination problems) have all been associated with in-utero cocaine exposure, clinical assessment and judgment play a major role in providing initial treatment to affected infants. Caution is urged when treating these infants as they are usually hyperirritable; provision of a "safe and nurturing" environment seems singularly important. At this time there are no pharmacological treatments available although work in this area is planned.

NIDA is currently participating in a coordinated effort with the Association for Medical Education and Research in Substance Abuse (AMERSA) and the Brown University Center for Alcohol and Addiction Studies to train physicians, including practitioners in obstetrics and pediatric medicine, to diagnose, intervene, and treat the multiple problems related to drug dependency.

In addition, in collaboration with NIAAA and OSAP, a drug abuse treatment curriculum is being developed by the American College of Obstetricians for schools of nursing. Perinatal addiction is part of the curriculum. NIDA also participates in the clinical faculty development grant program.

EFFECTS OF PATERNAL DRUG ABUSE ON THE FETUS

Mr. Dwyer: It is my understanding that NIDA is currently investigating the consequences of paternal drug abuse on the fetus. What is the status of this study?

Dr. Schuster: Information regarding the consequences of paternal drug abuse on the offspring was virtually nonexistent until recently. Preliminary results from an animal study have demonstrated that morphine administration in the male rat just prior to, and during puberty, produced significant effects on the development of their subsequent male progeny via alteration in the male hormone levels. The effects persisted from early in life through adulthood suggesting that exposure to opiates early in life may have long-term effects on the development of male offspring.

At this time there are no human studies regarding paternal influences on fetal wellbeing due primarily to the complexity of experimental design. Psychosocial parameters may be investigated by following the offspring of drug using parents to determine maturational delay and to determine the irreversibility of some mental deficits.

CHRONIC FATIGUE SYNDROME

Mr. Dwyer: Recently, I met with several constituents who suffer from Chronic Fatigue Syndrome (CFS). They told me of the debilitating physical and mental symptoms of the disease.

It is my understanding that the NIMH is currently conducting a collaborative study with the NIAID on CFS. What is the status of this collaborative study?

Dr. Judd: Chronic fatigue syndrome (CFS) is a relapsing, often postinfectious, syndrome of unknown cause. Patients have an array of debilitating symptoms including profound fatigue, low-grade fever, sore throat, painful adenopathy, myalgias, arthralgias and neuropsychiatric complaints.

In our collaboration with NIAID, we have advanced several lines of evidence indicating that patients with the chronic fatigue syndrome manifest a pathologic inactivation of stress-responsive, arousal producing neurotransmitter systems. These biologic changes could result in many of the clinical and biological manifestations we have identified in these patients in the past year. We postulate that the inactivation of these stress-responsive arousal systems reflect a virus-induced change in the expression of genes encoding proteins that modulate the stress response and are in the process of testing this hypothesis in clinical and basic studies.

We have also shown that patients with the chronic fatigue syndrome have a trend toward an increase in quinolinic acid in the cerebrospinal fluid. This change could reflect either the pathologic decrease in stress-responsive neurotransmitter systems or be a direct consequence of viral infection in the CNS. Quinolinic acid levels not only go up during inflammation, but this metabolite has also been implicated as a neurotoxin.

Mr. Dwyer: What is the level of funding for CFS research at NIMH for fiscal years 1990 and 1991?

Dr. Judd: In FY 1990 we plan to spend $150,000 to cover the cost of supplies and personnel to conduct this project. In FY 1991 we plan to spend $200,000 on this project.

DEPRESSION

Mr. Dwyer: Depression is a debilitating, prevalent, and costly form of mental illness. To date, there exist no tests for this disorder, and treatment is often difficult.

It is perceived that women suffer from depression more frequently than men. Some have contended that this is not the case, but that women exhibit more classical symptoms of depression than men; and that men are more apt to turn to alcohol, drugs, or become physically ill, and are not then diagnosed as depressive. What has your gender-based research in depression shown?

Dr. Judd: Women have a greater lifetime risk for the affective disorders, specifically unipolar depression, rapid cycling manic-depressive illness, and seasonal affective disorder. Men have a higher lifetime risk for alcoholism. The reason for these patterns may be due in part to differential social psychological factors, such as discrimination against women and adaptations to this condition e.g. learned helplessness, that predispose to depression. That the sex difference in depression and alcoholism is narrowing in more recently cohorts studied in the NIMH Collaborative Depression study, lends credence to the role of social factors in sex differences. The NIMH is currently supporting a variety of research on depressive cognitions, and on personality factors that predispose to depression as well as some work on depression and gender during critical times in adult life, e.g., divorce related depression.

In addition, events associated with the reproductive cycles may precipitate depression in women. Examples include depression associated with the use of oral contraceptives, the menstrual cycle and the postpartum period. Fluctuations in reproductive hormones may play a role in the vulnerability to the affective disorders, or to some subtypes, and could exert an influence directly or indirectly by effecting neurotransmitters, neuroendocrine, or circadian systems. The role of these systems in the etiology and pathogenesis of the affective disorders is currently being studied both by the NIMH Intramural Research Program and by grantees supported by the NIMH.

Mr. Dwyer: Apparently, children and even infants can also suffer from depression. What efforts are underway to examine the effects of depression on younger children?

Dr. Judd: Studies of depression in children have a very high priority at NIMH, and we are planning to place an even greater emphasis on this important public health problem in the future. We currently support 15 projects for about $4 million, including studies of the psychobiology of early-onset illness, familial and genetic factors, developmental aspects, the course of illness, and research on children at risk for affective illness because of having a clinically depressed parent. We are encouraging research on the development of safe and effective treatments for very young (prepubertal) children, because there have been almost no treatment studies in this population. Until recently, serious depression was not believed to exist in very young children, or even in adolescents, and these are very difficult groups to treat - so treatment research has lagged far beyond the adult field, a situation we are working hard to remedy.

Mr. Dwyer: Are there any ongoing studies to determine the relationship between depression and substance or alcohol abuse?

Dr. Judd: The NIMH Epidemiological Catchment Area Study (ECA) and the NIMH Collaborative Depression Study are two large multi-center studies that have examined the relationship between depression and substance abuse in population-based and clinical samples respectively. A common finding is the relatively high comorbidity of affective disorders and substance abuse disorders. For example, data from the ECA find that in subjects with a history of alcohol abuse and/or dependence, the relative risk for major depression to be between two and four times that of a non-abusing subject. This high degree of comorbidity between the affective and substance abuse disorders makes diagnosis difficult and complicates treatment.

NIMH is presently funding a five-year epidemiological study of persons with mental disorders that co-occur with alcohol and/or drug disorders in a nationally representative sample of persons age 15-54 years. Among the principal aims of the study are the following: 1) to estimate the national prevalence of comorbidity of depression with alcohol abuse and/or drug abuse disorders; 2) to investigate the natural history of co-occurring depression and alcohol and/or drug abuse; 3) to study risk factors for first onset and recurrence of co-occurring depression and substance abuse, evaluating the effects of primary disorder on secondary disorder; 4) to study the consequences of comorbidity of depression and substance abuse on the course of illness of both depression and substance abuse; and 5) to study service utilization, service needs, and barriers to utilization among persons with depression and substance abuse.

This current ongoing study builds on the NIMH Epidemiologic Catchment Area Program which provides information on prevalence rates of depression and substance abuse among 5 sites in the U.S.
A new initiative, the NIMH Molecular Genetics Collaborative, will carefully examine the familial/genetic relationships that may exist among substance abuse, alcoholism, and the affective disorders, particularly using a detailed diagnostic interview that will distinguish between primary affective disorders and affective disorders that are secondary to the occurrence of a substance abuse disorder.

AIDS RESEARCH

Mr. Hoyer: How is ADAMHA assuring that it maintains Leadership in the full range of AIDS research, prevention, and service delivery programs that fall within its mission area?

Dr. Goodwin: Within the Federal scientific community, the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA), by history and design, possesses a unique programmatic focus and expertise on brain and behavior as they relate to the major mental and addictive disorders. Thus, ADAMHA's scientific contribution to the Federal HIV/AIDS effort is based on knowledge and experience unique to the research activities of this Agency.

Combining expertise with current needs, ADAMHA conducts research to better understand, assess, and treat the neuropsychiatric, behavioral, and psychosocial aspects of HIV infection and AIDS. The Agency HIV/AIDS program includes basic research at the biological, behavioral, and psychological level, as well as clinical services and intervention research.

Through demonstrations and other mechanisms, the ADAMHA offices of the Office for Treatment Improvement and the Office for Substance Abuse Prevention bridge biomedical and behavioral research with substance abuse treatment and prevention systems which convey new information to providers and provide feedback which helps sharpen our research focus. There is a continuing evaluation of these efforts not only to assess program performance but also to identify promising strategies.

ADAMHA's approach to the HIV epidemic is multifaceted, with a mission that is evolutionary, thus our planning is focussed on both the short-term improvement of prevention and treatment practice and long-term improvement by developing new knowledge through research.

Mr. Hoyer: Are there any new noteworthy research findings regarding the neurobiology of the disease that have come out of ADAMHA supported research?

Dr. Judd: Several NIMH supported studies have suggested that HIV-infected individuals show deficits in cognitive and neuropsychological function. Research using an extensive cognitive battery with emphasis on verbal memory and processing speed has indicated that HIV-positive individuals showed statistically significant memory deficits as well as a slowing in the processing of specific types of information compared with HIV-negative individuals.

Other studies have shown that AIDS patients show a markedly worse neuropsychological profile than persons with Lyme disease, another brain infection. Patients' decrements in performance on tests of psychomotor speed and visual-motor skill were found not to be a secondary effect of depression or due to chronic brain infection *per se*, adding to mounting evidence for a subcortical dementia in HIV infection.

In the NIMH intramural research program, approximately 50 percent of the AIDS research is directed toward understanding ADC, including investigation of virus/CNS interactions, cognitive dysfunction and dementia associated with AIDS, and treatment of the HIV effects on the brain. ADC may be caused by direct HIV infection of the brain or by products released by macrophage or the virus. The theory on direct causation in brain has gained rapid acceptance since HIV is similar to other slow viruses that are neurotropic. Data has emerged documenting the clinical pathologic correlates of dementia in AIDS patients where no space occupying tissue or destructive lesion was identified.

NIMH proposes to initiate a new program to develop psychotherapeutic agents from natural sources which may have potential for treatment of HIV infection in the brain. The NIMH will receive plant and animal samples with the potential for yielding such drugs from the National Cancer Institute's Natural Products Screening Program.

NIMH intramural scientists have found markedly increased levels of quinolinic acid in cerebrospinal fluid (CSF) of patients with AIDS dementia. Quinolinic acid, which is normally present only in trace amounts in the brain, is a naturally occurring and potentially neurotoxic byproduct of the metabolic breakdown of tryptophan. CSF levels of this toxic metabolite correlate with dementia ratings of these patients, suggesting that quinolinic acid may play a role in the pathogenesis of AIDS dementia. Since quinolinic acid can be made by macrophages and lymphocytes, which are immune system cells, the investigators postulate that local production of this neurotoxin may be responsible for central nervous system dysfunction underlying AIDS dementia. They also suggest that monitoring CSF levels of quinolinic acid may serve as a marker for AIDS dementia.

An NIMH intramural research team has developed a technique to chemically alter a synthetic chain of amino acids, known as peptides, to stop HIV from infecting cells. Discovery of this short chain of 11 amino acids grew out of research on the chemical sequences contained in the CD4 receptor. The substance, known as CD4#18, acts against several variants of the human AIDS virus and the Simian AIDS virus, and is currently undergoing testing in primates.

Mr. Hoyer: What is the proportion of the FY 90 and FY 91 research budgets to examine "at-risk" behavior and behavior change--to what extent have you been involved in the evaluation of prevention and education and counseling programs supported by the CDC?

Dr. Goodwin: Both the National Institute on Drug Abuse (NIDA) and the National Institute for Mental Health (NIMH) devote large portions of their budgets to examining at-risk behavior and behavior change.

In FY 1990, NIDA is devoting approximately 66 percent of the total AIDS budget is allocated for behavioral research. In 1991, approximately 61 percent of the total AIDS budget is allocated for behavioral research. In addition, CDC and NIDA have maintained a close informal collaboration with one another for several years. There has always been a free exchange of information and ideas. NIDA has a seat on CDC grant review committees and often communicates with grant project officers. At this time, appears to be effective and has served each other needs well.

In FY 1990, approximately 40 percent of the NIMH budget is devoted to at-risk behavior and behavior change. In FY 1991, this percentage will increase to 43 percent. NIMH continues to collaborate with CDC in the area of AIDS prevention. NIMH cosponsored with CDC the National Research Council study on Evaluating AIDS Prevention Programs and a program announcement on behavioral change research. In FY 1990, ADAMHA, CDC and NICHD, will support projects through the cooperative agreement mechanism for a "Multi-Site, Multi-Population Behavioral Trials to prevent the Further Spread of HIV Infection". This study will also provide the opportunity to evaluate prevention programs, including education and counseling, as well as controlled trials to assess innovative behavioral strategies to prevent the further spread of HIV infection.

NIMH PREVENTION AND CHILDREN

Mr. Hoyer: The committee provided funds for the Community Support Demonstration program for prevention services in the FY 90 appropriations bill. How much will be spent in FY 1990 on this project, and how much does the FY 1991 budget include for this activity?

Dr. Judd: In both the FY 1990 and FY 1991 budgets, $4 million is included to support prevention demonstration projects.

Mr. Hoyer: What is the status of the RFA for this services research demonstration project focusing on prevention?

Dr. Judd: The NIMH has issued two special RFAs for services research demonstration projects. One focuses on prevention of youth suicide and the other is on prevention of conduct disorder.

NATIONAL ADVISORY MENTAL HEALTH COUNCIL RECOMMENDATIONS

Mr. Hoyer: The National Advisory Mental Health Council recently submitted a report in compliance with a request by the Congress on a "National Plan for Research on Child and Adolescent Mental Disorders". As I understand the recommendations, the appropriation for training, and career development, the NIMH intramural program and basic, clinical and services research would increase from about $92 million today to $283 million within five years. Could you outline for the committee the Council's recommendations?

Dr. Judd: The NIMH Advisory Council report calls for increases in all of the areas that you mentioned. In 1990, the NIMH spent $92.3 million for all of these areas. The Council report calls for an increase in 1991 to $152.5 million, and as you mentioned, to $283 million by 1995. The Council would like to see research career development almost triple the first year, since this is the most pressing need. Services research and intramural research would almost double, because of the opportunities there. Basic science and clinical research would increase by over 50 percent in the first year, but would increase from $77 million in 1990 to $114 million in 1991 and to $195 million in 1995.

Specifically, the Advisory Council's recommended funding increases would allow us put in place major new research initiatives to discover the causes of child and adolescent psychopathology, determine the effectiveness of biologic and psychotherapeutic treatments, develop more effective service delivery systems, and increase our numbers of qualified researchers. The Council anticipates that we would be able to establish a significant number of clinical and neuroscience research centers to make major breakthroughs in various aspects of child and adolescent mental disorders. These funds might allow us to provide financial and scientific support for the career development of 90 additional child and adolescent mental health researchers, create and fund additional research training programs across the nation, and increase the number of individual grants awarded to qualified investigators.

However, the Advisory Council's plan was not considered in the context of other competing demands on resources such as AIDS and drug abuse.

Mr. Hoyer: Are the mental health prevention demonstration grants funded in last year's appropriation bill consistent with the recommendations of the Council?

Dr. Judd: Yes, the mental health prevention demonstrations are consistent because they will focus on two important areas of child and adolescent disorders identified by the Council--conduct disorders and youth suicide.

Mr. Hoyer: How close to the $152 million recommendation for FY 91 does the Budget request come?

Dr. Judd: The FY 1991 budget request provides approximately 73 percent, or $111.9 million of the $152.5 million recommendation.

Mr. Hoyer: Could you outline for the subcommittee the priorities for funding this program in FY 1991 if you were to receive additional funds above the request?

Dr. Judd: I would like to emphasize, Mr. Hoyer, that The National Plan for Research on Child & Adolescent Mental Disorders is the Institute's top priority for additional funds in 1991. However, The National Plan is followed closely in priority by the continuing implementation of the National Plan for Schizophrenia and the Decade of the Brain Plan. To some extent, all three of these plans are interrelated, and they build upon and support each another. Funds above the request for The National Plan for Research on Child & Adolescent Mental Disorders would help the Institute move all of these plans forward.

PSYCHIATRIC DISORDERS AND SUSCEPTIBILITY TO SUBSTANCE ABUSE

Mr. Hoyer: Substance abuse, as you note in the justification, is no longer simply a social problem. It has become a major public health crisis. What do we know about the impact of psychiatric disorders on young people and their susceptibility to becoming substance abusers?

Dr. Goodwin: Several NIDA supported studies are designed to examine the relationship between substance abuse and psychopathology, including depression, in order to determine the etiological role that one disorder may play in the development of the other. To date, treatment outcome in substance-abusing individuals has been found to be deleteriously affected by the presence of co-existing affective illness, and vice versa.

Young people should be viewed within their family context. A recently completed study on familial transmission of opioid addiction suggests that psychopathology is being transmitted in the families of substance abusers and that it is one of the underlying causes of substance abuse. While investigators and clinicians have hypothesized for some time that familial factors contribute to the development of drug abuse, few empirical studies with abusers of non-alcoholic substances have been made. Research on this area is a high priority at NIDA.

Data from the NIMH Epidemiologic Catchment Area Program showed that four major disorders commonly begin in late adolescence or young adulthood. The median age at onset for anxiety disorders is 15 years; for major depressive episode, 24 years; for drug abuse or dependence, 19 years; and for alcohol abuse or dependence, 21 years. Findings also suggest that for respondents 18-30 years old, having a major depressive episode or anxiety disorder doubles the risk for later drug abuse or dependence. Data from an NIMH funded study of co-occurring mental and substance disorders in a nationally representative sample is currently underway and will give us more information on this important topic.

PREGNANT AND POSTPARTUM WOMEN AND THEIR INFANTS

Mr. Hoyer: The OSAP programs targeting Pregnant and Postpartum Women and Their Infants is the most well-known effort that targets a growing social and public health problem. How many applications were received for funding under this program?

Dr. Goodwin: To date, a total of 320 applications have been submitted under the Pregnant and Postpartum Women and Their Infants Demonstration Grant Program.

Mr. Hoyer: How many projects are funded; could you elaborate on the goals of programs that will be funded, and what changes will occur in the program under the 91 request?

Dr. Goodwin: As of February 1990, 45 grants have been awarded under this program. The goals of the projects funded are: 1) to promote the involvement and coordinated participation of multiple organizations in the delivery of comprehensive services for substance using pregnant and postpartum women and their infants; 2) to increase the availability and accessibility of prevention, early intervention, and treatment services for these populations; 3) to decrease the incidence and prevalence of drug and alcohol use among pregnant and postpartum women; 4) to improve the birth outcomes of women who used alcohol and other drugs during pregnancy and to decrease the incidence of infants affected by maternal substance use; and 5) to reduce the severity of impairment among children born to substance using women.

During FY 1991, OSAP will support 15 additional grants to continue the program efforts initiated during FY 1989 and significantly expanded during FY 1990.

Mr. Hoyer: Could you outline for the committee the projects that are funded by ADAMHA that are specifically targeted toward the children of substance abusing parents?

Dr. Goodwin: While most of the grants awarded under the Pregnant Women and Infants program focus primarily on the provision of comprehensive services delivery to substance abusing women, at least 19 projects have indicated a program that impacts on the infant as well as the mother.

CHILDREN WITH SUBSTANCE ABUSING PARENTS

Mr. Hoyer: What specific information do you have about Federal dollars, like the ADMS Block Grant or programs funded through the OTI, that States are using to target this special population of children whose parents are substance abusers?

Dr. Goodwin: The ADMS Block Grant contains no legislative requirement for States to specifically fund or report information on services provided to children of substance abusers. Current legislation requires 10 percent of the ADMS Block Grant funds to be set-aside for programs and services designed for women (especially pregnant women and women with dependent children). This, of course, only scratches the surface of those individuals whose parents may be considered substance abusers. Data on this population will be available over the next several months, as described below.

Anecdotal information from State annual reports, national survey data, and data from voluntary reporting to national organizations suggest that States are heavily targeting youth and adolescent populations for enhanced alcohol and drug abuse services. Information from the Alcohol and Drug Abuse Treatment and Rehabilitation Block Grant (ADTR) indicated the most predominant targeted population for these new Federal substance abuse treatment funds was youth and adolescents, including children of alcoholics and drug abusers (47 States). Many of these early efforts to enhance services to this population continue to be funded through increased resources available from the ADMS Block Grant.

National survey data for 1987 (1989 data are currently being compiled) show over 10 percent of the clients reported in public and private funded treatment units are under the age of 18. State reporting to the National Association of State Alcohol and Drug Abuse Directors shows that 121,564 treatment admissions in 1988 were under the age of 18, representing an increase of almost 50 percent over the numbers of adolescents in treatment from their 1986 survey. Again, while it is not possible to determine what percent of this population are children of substance abusers, given the high-risk associated with such individuals developing a substance abuse problem, it is expected that a significant number of these admissions are represented in this sub-population.

Among the populations targeted for attention in its current initiatives, the Office of Treatment Improvement (OTI) has specified increased attention to adolescents (Ages 10-18) in the new Targeted Cities and Critical Populations programs. Grant applications have been solicited for funding in FY 1990, with proposals due by May 23 and June 1. It is too soon to determine whether any grantees will address this specialized population.

MEDICATIONS DEVELOPMENT

Mr. Hoyer: How much is requested for medication development in the FY 1991 request, and could you elaborate on the progress being made in this area, both in the area of substance abuse and other mental disorders like schizophrenia?

Dr. Goodwin: Medication development is one of the major priorities of ADAMHA in the decade of the 1990s. Research on, and development of, new medications which go beyond the mode of action of the typical psychopharmacological agents is priority for the agency, and can be exemplified by research in both the substance abuse and mental health areas.

In the area of mental health, $200,000 is requested for drug development activities in 1991. Investigations are being conducted to address the serotonergic neurotransmitter system, and newly refined studies address the dopamine neurotransmitter system. In particular, there has been progress in the research and development of new serotonergic antagonists which are effective in the treatment of depression and obsessive compulsive disorders. It has also been shown that more selective serotonergic agents are useful in the treatment of schizophrenia, particularly in the case of patients whose psychotic symptoms have not responded to treatment with typical antipsychotic agents. These advances are exciting and represent a conceptual breakthrough in the development of agents to treat serious mental disorders. Several of these new serotonergic agents have been recently introduced into the United States. Their impact in the treatment of depression, obsessive compulsive disorders, and certain forms of schizophrenia is already beginning to be felt. It is quite possible the further advances in this area of research will lead to even greater benefits in investigation of major mental health problems.

Preliminary research into more selective dopamine blocking agents, in particular agents that selective block what is called the D-2 receptor may prove to be useful in more specific treatments of schizophrenia as well. However, these studies are quite preliminary and further investigation is necessary before one can fully predict their usefulness in clinical practice.

The National Institute on Drug Abuse has requested $40,000,000 for medications development in FY 1991. Research is progressing rapidly. We have developed a list of potential medications, some of which have been tested in clinical pharmacology studies and clinical trials (buprenorphine, desipramine, fluoxetine, antipsychotic agents and calcium channel blockers) in cocaine abusers as well as several medications for opiate abusers. We have also funded seven Treatment Research Units which have been and will continue to conduct clinical studies on new medications. Currently, studies on buprenorphine, carbamazepine, mazindol, bromocriptine, and flupenthixol have been initiated or are in various stages of analysis. We are actively negotiating Cooperative Research and Development Agreements (CRADAs) with 3 pharmaceutical firms and discussing CRADAs with 4 others.

The NIDA medications development program will also be providing assistance and testing services to NIAAA and NIMH for toxicology testing of new medications being developed by them for the treatment of alcoholism or mental disorders. It is expected that many of the chemical compounds that will be identified or synthesized as part of the medications development program will, through their CNS actions, have potential value for certain types of substance abuse as well as mental disorders.

Mr. Hoyer: Are we providing adequate funding for research on drug development that could help fight addiction?

Dr. Schuster: Funding levels are adequate for the current state of the program. However, we have several initiatives we would like to accomplish over the next 5 years. Within the next year, our ability to develop new medications which have shown promise will be limited by our capacity for toxicology testing and the conduct of clinical trials. In addition, we currently do not have the capability to perform chronic toxicity and carcinogenicity testing. Expanded capacities will be required as new medications are developed and move into Phase III, large-scale clinical trials. Increased research support will be necessary if these initiatives are to be pursued.

Mr. Hoyer: What in your professional judgement is an appropriate level of funding for medication development in FY 1991?

Dr. Schuster: The current level of funding for the program is $40 million. We believe approximately $60 million could be used in FY 1991.

TARGET CITIES GRANT PROGRAM

Mr. Hoyer: Could you elaborate on the Target Cities Grant Program and how you will evaluate the programs funded under these grants?

Dr. Goodwin: The target cities program is designed to assist improving the quality and effectiveness of treatment services in urban centers with critical drug abuse treatment needs. The program will support activities designed to improve the delivery, accessibility, and infrastructure, and foster coordination and collaboration among local treatment programs. Applicants will be expected to develop proposals based on a comprehensive assessment of the treatment system in the target city.

It is intended that treatment improvement initiatives developed in the selected cities will serve as models to the rest of the nation for systems that provide high quality, patient-oriented, coordinated, accessible drug abuse treatment. The intent of this program is not to support expanded treatment services, but rather to improve existing services.

Applications must include an evaluation plan that addresses both process and outcome components. The results of the process evaluation should, at a minimum, provide a useful description of what kind of changes were made in the treatment system, by whom and how and where the changes were implemented. The outcome evaluation is intended to assess whether the program was effective in meeting the goals resulting from the applicant's needs assessment. The applicant must incorporate into the plan responsibilities for the data collection and analysis necessary to conduct evaluation at the project level, and an outline of the types of data to be collected.

In addition to the applicant's individual project evaluation, a national evaluation will be conducted by OTI. The application must state the willingness of the applicant to participate in the national evaluation which will use the following types of criteria:

- Treatment programs will be measured by improved care and management
- Increased numbers of retained drug-free patients
- The process evaluation, at a minimum, must provide a useful description of what treatment changes were made and how these changes were implemented
- Outcome evaluation is intended to assess effectiveness in meeting the goals

REGIONAL APPROACH TO TREATMENT AND PREVENTION

Mr. Hoyer: To what extent has OSAP or OTI evaluated the need to attack the problems of treatment and prevention on a regional basis--the Washington metro area is a prime example of the spill over effects of increasing substance abuse and inadequate treatment facilities?

Dr. Goodwin: OTI has established a Community Assistance Branch that is made up of individuals who will concentrate their efforts in identifying the treatment needs of local communities and regional areas. They are to spend most of their time in the field working with treatment programs, government officials, human service resources, and community representatives to facilitate cooperation among these groups. OTI's Target Cities grant program is its first attempt to move to a broader perspective on treatment planning and financing than the program by program approaches used in the past. OTI is already working with the States to assist them to do statewide treatment planning.

The OSAP recognized the need to address the specific prevention needs of individual communities throughout the country. The Community Partnership program was designed to assist communities in the development of comprehensive prevention programs that address drug abuse prevention and treatment issues/needs on a regional or local basis. OSAP also works with various communities throughout the U.S. which have specifically requested OSAP assistance. One example is the District of Columbia. OSAP has, since January 1989, participated in the ADASA Prevention Work Group (part of the D.C. government) and co-sponsored the Leadership Action Workshop held in November 1989. The mission of the Work Group is to nurture ward action teams in the development of coordinated, community prevention systems.

PROTECTION AND ADVOCACY PROGRAMS

Mr. Hoyer: Could you explain the administration's plans for the protection and advocacy programs with regard to the planned third year phase-out?

Dr. Judd: The Administration is proposing a reduction in fiscal year 1991 and a phaseout of federal support for the Protection and Advocacy (P&A) Program because it believes that this is an activity for which the States, rightfully, should have responsibility.

Federal technical assistance activities have been directed toward developing strong P&A infrastructures; funding which has been provided to-date has enabled P&A systems to increase their staffs, to receive technical assistance from the NIMH to expand their program activities to serve mentally ill individuals, and to demonstrate their value to the States.

Approximately half of the P&A systems now receive some amount of support from their State governments. A phaseout of Federal support will require the P&As to seek and obtain additional funding from State government and other private or charitable sources. Phaseout activities could target State and public outreach programs to enable financial independence.

Mr. Hoyer: What is the likely disposition of the projects funded under this program?

Dr. Judd: Since the Law mandates that Protection and Advocacy systems (P&As) be independent of mental health service providers, States could fund P&As through other departments, establish separate agencies, or commissions, or they could fund the P&A services through State University Law clinics as in Alabama. States could incorporate some of the P&A activities into existing quality assurance review mechanisms e.g., State Facilities Licensing Accreditation or Medicare/Medicaid Certification Review to ensure compliance with patient rights mandates.

Most of the P&A Systems are private not-for-profit agencies; they could seek support from national charitable foundations, e.g., Red Feather, United Way; they could solicit funds from private charitable foundations; and they could engage in independent fundraising activities.

COMMUNITY SUPPORT PROGRAM

Mr. Hoyer: Could your explain the 5 percent drop in the request for the community support program for FY 1991?

Dr. Judd: While the FY 1991 budget request for the Community Support Program includes a 5 percent reduction, the $32.9 million proposal represents an increase of 7.7 percent over the FY 1989 level of $30.5 million. In FY 1991, all grants will be provided continuation support and $5 million is available for 36 competing and new awards.

WOMEN AND RESEARCH

Mr. Hoyer: What percentage of grants currently being awarded can be identified as specifically relating to women's issues?

Dr. Goodwin: Using a strict definition of "women's issues", approximately 6 percent of active projects funded by NIAAA, NIDA, and NIMH may be so categorized. These are only those studies whose primary focus is related to women's issues. Some examples are: AIDS risk in pregnant IV drug users and their children, the traumatic aftermath of violence against wives, neuropeptides in the control of reproductive behavior, and problem drinking in women.

It is important to note that the vast majority of research supported by ADAMHA is relevant to both men and women. In NIAAA only 150 of 1400 active projects use only male subjects, and in NIMH only 201 of 1760 projects use only males. This situation is similar in NIDA.

Mr. Hoyer: How many funded projects or interdisciplinary centers are in the area of women's health or include evaluation of gender differences?

Dr. Goodwin: Approximately 42 percent of active projects funded by NIAAA, NIDA, and NIMH relate to women's health or include evaluation of gender differences.

Mr. Hoyer: Can you provide the committee a list of these studies, their cost, and a list of the studies with exclusionary criteria for women and their funding levels?

Dr. Goodwin: The information requested is difficult to provide due to the limitations of the existing databases and to the differences in the information systems in use by the various Institutes. It is ADAMHA policy that investigators are asked to include women in the study population for all clinical research efforts, except where the disorder affects only males or where involvement of pregnant women might expose the fetus to undue risks. Peer reviewers are asked to evaluate plans for the inclusion of women or the rational for their exclusion as part of their evaluation of the application. As noted above, **the vast majority of studies supported by the Agency are, in fact, relevant to both sexes.** Almost all studies using only one gender are focused on a condition or circumstance limited to one sex such as being related to pregnancy, to incarcerated men, to effects of a sex hormone, to fathering behaviors, etc.

Mr. Hoyer: How many studies have been conducted that look at pharmacological response to psychotropic drugs in women -- is it important to know the drug-hormone interaction?

Dr. Schuster: NIDA funds a major clinical research center that focuses on the interaction between abused drugs and hormones in women. The purpose for conducting this research is that reproductive dysfunction as well as obstetric outcome and developmental impairment in the neonate may be consequences of chronic drug abuse. Eleven studies have recently been published on this topic by investigators at this center but a clear picture of abused drug-hormone interaction has not yet emerged. Further studies are underway to help clarify the nature and extent of this interaction.

Mr. Hoyer: Is the fact that hormonal structures differ by gender an area of interest in your research efforts?

Dr. Goodwin: Hormonal and gender effects are a significant area of clinical research interest at NIMH. Within the Schizophrenia Research Branch, for example, there are two active projects which focus on gender differences, one at Emory University in Atlanta (Dr. Richard Lewine) and the other at Harvard University (Drs. Ming Tsuang and Jill Goldstein). Dr. Lewine is determining whether structural brain impairments and certain (negative) symptoms of schizophrenia are more common or severe in men than in women. This is of interest since men typically develop schizophrenia at an earlier age, have a more severe course and outcome, and poorer treatment response than women. In this project, male schizophrenic patients will be compared with female patients and normal controls on clinical measures, magnetic resonance imaging (MRI) brain scans, and neuropsychological test results.

The study being conducted by Drs. Tsuang and Goldstein is looking at schizophrenia and schizophrenia spectrum disorders in a large sample of patients (the Iowa 500 and non-500) and their close relatives. Results from their study tend to confirm the earlier age of onset of these disorders in men, and suggest that women may have a more "familial" (probably genetic) form of schizophrenia associated with later age of onset of the disorders. They are now attempting to analyze further the possibility that (both male and female) close relatives of female schizophrenic patients may be at greater risk for developing schizophrenia than the close relatives of male schizophrenic patients. In addition to these studies, we are pleased to note that the next issue of Schizophrenia Bulletin (Vol 16, No. 2) due in June of this year will be devoted to the topic of gender and schizophrenia, and will contain 14 papers on the topic.

Also, the Mood, Anxiety, and Personality Disorders Research Branch supports research on possible gender influences on the development of depression, and on the role of events unique to women, e.g., menstruation or childbirth in relation to depression. This fact is of interest to researchers in the NIMH Intramural Research Program for a variety of reasons. There is evidence that exposure during development to gender specific hormones alters the development of the brain and may underlie differential responses of males and females to the same environmental stimulus, e.g., medication or infection. Scientists do not currently understand gender specific increased vulnerability to the development of many psychiatric disorders that are commonly observed. For example, there is a greater incidence among females in specific psychiatric diseases such as unipolar depression, anorexia nervosa, and bulimia nervosa.

Intramural scientists are currently investigating the mechanisms by which menstrual cycle hormones and anabolic steroids can produce the changes in mood and behavior that currently represent a significant source of expense and morbidity.

In the basic brain and behavioral sciences NIMH is pursuing a wide range of studies in humans and animals to examine gender specific effects of hormones and the gender differences that exist in the anatomical structure and function of animal brains.

The National Institute of Mental Health, in conjunction with the National Institute of Child Health and Human Development, held a research conference on April 4 and 5 on "Mental Health Aspects of Reproductive Function in Women Over the Life Cycle." The participants reviewed current knowledge about mental health aspects of the reproductive function by looking at several perspectives including menstrual endocrinology, behavioral pharmacology, psychopathology, psychosocial issues and treatment. The Institute expects to issue a program announcement requesting applications in this area.

This is also a topic of interest to NIAAA and alcoholism research in this area can be summarized into two broad categories.

One line of research addresses the effects of alcohol on the endocrine system and how it affects men and women differently. In men, chronic alcohol consumption may result in testicular atrophy and infertility, impotence, or reduced libido. Chronic alcohol use also causes feminization in 20 percent of alcoholic men. In women, chronic alcohol use leads to severe gonadal failure and infertility. Sixty one percent of alcoholic women experience disturbance and 9 percent experience early menopause. Some women also experience diminished secondary sex characteristics, such as breast and pelvic fat accumulation.

The second line of research addresses the gender-specific effects of prenatal alcohol exposure in the offspring. Prenatal alcohol exposure in animals has been shown to alter gender-specific behaviors in juvenile and adult offspring. NIAAA researchers are studying mechanisms by which prenatal alcohol exposure alters the development of brain structures that control hormone secretion and sexually dimorphic behaviors. Of particular interest are possible gender differences in hormonal responses to stress among adult offspring prenatally exposed to ethanol.

At this time, gender differences and their relevance to drug abuse are unknown. A NIDA supported research center is exploring the interaction between drug abuse and female hormones, but no conclusions can as yet be drawn from this research.

Mr. Hoyer: Are these hormonal and other gender differences a difficult or costly variable to control for in the broad range of research supported by ADAMHA?

Dr. Goodwin: There is no single answer to this question. The degree of difficulty and cost depends entirely on the circumstances and availability of subjects in each research setting. However, if all ADAMHA human research projects were required to provide endocrine profiles on all subjects, the costs would very likely be extremely high.

ADAMHA currently requires that all research applications address the question of whether or not the study will include women as research subjects, and the impact in terms of the research question being addressed.

WOMEN RESEARCHERS

Mr. Hoyer: What is the percentage of female researchers employed by ADAMHA?

Dr. Goodwin: The ADAMHA has approximately 601 positions involving research, research direction, and research policy. Women occupy 45.9 percent of these positions. Female researchers located in the three ADAMHA intramural research programs represent 27.8 percent of total intramural researchers. (These figures include only those employees who count against Full-Time Equivalents [FTEs]).

Mr. Hoyer: What is the percentage of female physicians holding Branch Chief equivalent or higher positions intramurally or extramurally at ADAMHA?

Dr. Goodwin: Female physicians (M.D.s) occupy 2 percent of the approximately 246 ADAMHA branch chief and higher line management and equivalent grade staff positions (4.7 percent of 42 intramural positions; 1.5 percent of 204 extramural positions). In the strictly research area (intramural and extramural research divisions and extramural project review), women occupy 21 of 107 lab chief, branch chief, deputy director, and director positions, or 19.6 percent. Three of these women (2.8 percent of total) are physicians.

Mr. Hoyer: What is the percentage of women who are research fellows, and how many have been retained as scientists at ADAMHA in FY 1989 and FY 1990?

Dr. Goodwin: The ADAMHA has a total of 184 research fellows (who count against FTEs), of whom 61, or 33 percent, are women.

In FY 1989 nine fellows were retained as scientists (i.e., given tenure); seven of these (77.8 percent) were women. In FY 1990 six fellows have thus far been retained, including one woman (16.7 percent).

WAR ON DRUGS

Mr. Pursell: President Bush has made the Drug War one of his top priorities, and the budget for the War on Drugs has increased from $6.3 billion in FY 1989 to a requested $10.6 billion for FY 1991.

International activities and other law enforcement efforts have received the largest percentage increase. With countless drug abusers awaiting treatment, do you believe we are doing enough to address this part of the drug problem?

Dr. Goodwin: The President's National Drug Control Strategy is divided into three approaches: 1) Interdiction accounts for approximately one-third of the total federal drug budget, and is supported from federal sources only; 2) Criminal Justice also accounts for about one-third of the federal drug budget, but support for these efforts is shared with state governments; 3) Treatment/ Prevention also receives about one-third of the federal drug budget, but the major share of support for these efforts comes from state governments.

We believe the research, prevention, and treatment increases proposed in the budget request are generally sufficient to address these aspects of the drug problem in 1991. Included in our budget is a substantial increase in block grant funds to help address the treatment issue to which you refer. We need to determine the effect these initiatives have, including results of our research and treatment demonstrations, in order to see whether we are in fact doing enough.

Mr. Pursell: Does ADAMHA have an adequate number of researchers and laboratories to do this work?

Dr. Goodwin: Since FY 1989 ADAMHA's research budget for drug abuse has increased by $110 million or 57 percent. The expansion in research activities has increased the need for additional laboratory space. In addition, it has highlighted the problem of recruiting adequate numbers of qualified researchers in this area to ADAMHA.

ESTIMATED BUDGET NEEDS FOR FY 1991

Mr. Pursell: What are your estimated budget needs for FY 1991?

Dr. Goodwin: ADAMHA's FY 1991 budget request for anti-drug abuse activities is $1.4 billion. This is a $200 million increase over the FY 1990 level of $1.2 billion and a $660 million increase over FY 1989. The increase essentially results in a doubling of ADAMHA's drug budget over 2 years. Significant increases occur in drug prevention, treatment and research.

TREATMENT OUTCOME RESEARCH

Mr. Pursell: The President has requested $8.3 million for Treatment Outcome Research, up from $7.8 million for FY 90. Please describe this account for the subcommittee, and tell us some of ADAMHA's recent achievements in this area.

Dr. Goodwin: Treatment Outcome Research (TOR) grants have been a part of ADAMHA's research budget since 1974 and focus on the evaluation of treatment regimens and the identification of favorable outcomes in substance abuse treatment. In the Anti-Drug Abuse Act of 1986, Congress began to appropriate funds specifically for TOR. While the request for TOR is $8.3 million, it is important to recognize that this amount is only a fraction of the amount actually spent on TOR grants within the research budgets of NIDA and NIAAA.

NIDA's TOR is concerned with a broad spectrum of scientific studies on drug abuse treatment. The primary objective of this research is to enhance the effectiveness of drug abuse treatment. This includes efforts to reduce drug-related morbidity and mortality, with particular emphasis on reducing the intravenous spread of AIDS. Included are controlled clinical trials that will determine the efficacy and safety of psychotherapeutic, behavioral, and pharmacologic interventions. Long-term outcome evaluation studies of treatment provided by different modalities or settings are particularity important.

Additional research areas encompass: drug counseling; the assessment and diagnosis of drug abusers and the nosology of substance abuse and dependence disorders; outreach models to significantly increase the numbers of clients entering drug abuse treatment; specific interventions that improve the rates of retention in treatment; aftercare strategies; relapse prevention; the relationship between drug abuse/dependence disorders and co-morbid psychiatric disorders; laboratory and clinical investigations of biopsychiatric and psychosocial correlates of treatment impact on patients, including specific research into behavioral and neurochemical factors which predict and quantify responses to various treatments.

NIDA is currently funding several on-going studies. Three of these are investigating cocaine-and alcohol-dependent individuals seeking treatment. The objective is to learn how to match patient characteristics with the most effective type of treatment. These studies are being carried out in private as well as publicly-funded treatment facilities, and should also give some insight into how private treatment compares to publicly-funded treatment. NIDA is also supporting analyses of an extensive drug outcome database (TOPS). An additional three studies are concerned with the evaluation of adolescent drug treatment. This year NIDA plans to fund a new evaluation research center for treatment outcome research.

TOR funds in NIAAA support projects which contrast the effectiveness of inpatient versus outpatient treatment of alcohol dependence. NIAAA initiated these projects in 1988, and expects preliminary results within the next two years. Because inpatient treatment for substance abuse is expensive, it is important to know when inpatient treatment rather than a less intensive level of care is needed to assure a successful outcome. The results of these projects should be helpful in making that distinction.

COORDINATION WITH OTHER FEDERAL AGENCIES

Mr. Pursell: How do you coordinate with other Federal health agencies in your studies?

Dr. Schuster: NIDA works closely with the Centers for Disease Control in AIDS research, especially where the intravenous drug abusing population and their sexual partners constitute a large risk group. NIDA also engages in cooperative efforts with NIH institutes on a formal and informal basis. Arrangements underway with the NIAID this year will expand the number of IV drug users in AIDS clinical research studies. NIDA has transferred $9 million to the Health Resources and Services Administration as part of a multi-year effort to develop models for effectively providing drug abuse treatment through the primary health care system. Under a cooperative agreement between NIDA and the Bureau of Prisons, the two agencies will jointly study the effectiveness of various types of drug abuse treatment programs for incarcerated drug abusers. Through formal interagency work groups as well as less formal networking systems, NIDA staff actively maintain contact with staff at other agencies to coordinate efforts and share data and information on projects of mutual interest.

OTI is collaborating with HRSA on issues of linking the primary health care system and the substance abuse system. OTI is also collaborating with the Department of Labor and HUD on public housing and homeless issues. OTI is further working with the Department of Justice on issues of substance abusers in the criminal justice system.

BREAKTHROUGHS IN DRUG TREATMENT

Mr. Pursell: Are you close to any breakthroughs in the treatment of drug abusers?

Dr. Schuster: While breakthroughs, when they happen, are dramatic, most useful strategies are constructed step-by-step. There are, however, many promising leads in the treatment of drug abusers that combine medications with counseling, psychotherapy, or behavioral techniques. NIDA is currently supporting research to evaluate promising treatment modalities and approaches which could have significant impact on treatment services and effectiveness.

Research on the role of risk factors in the etiology of drug abuse has provided valuable information for improving drug abuse interventions; this research will now target infants and young children. Family therapy research has demonstrated the effectiveness of interventions that involve the family system. Following this lead, interventions that alter the progression from the initiation of drug use to drug abuse and dependence will be investigated.

Outreach programs that encourage drug abusers to enter treatment have been shown to be effective. Additional research on innovative forms of outreach, e.g. vouchers for free treatment; social networks; outreach through sex partners, will make it possible to make these programs more effective.

Several highly sophisticated techniques for determining drug exposure and the effects of drug exposure are being developed. These are promising techniques that will enable the accurate determination of maternal drug use and the degree to which infants have been exposed to illicit drugs. These techniques will allow us to conduct long-term epidemiological studies to determine obstetrical and fetal effects of illicit drug use during pregnancy. Using this information, we will be able to devise appropriate intervention programs.

Preliminary information from a study which has been exploring why certain groups of black or white non-hispanic individuals become drug addicts but others do not has revealed that strong familial support influenced individuals against drug use. These results hold promising leads that could be used in the development of community based prevention intervention programs targeted toward high risk youth.

The recent discovery of a THC receptor in the brain promises to elucidate the mechanism of action of THC and to help develop medications that may reverse the adverse consequences of THC overdose.

ADMISSION OF DRUG ABUSERS SEEKING TREATMENT

Mr. Pursell: What percentage of drug abusers who are seeking treatment are gaining admission to treatment programs?

Dr. Goodwin: The question is not how many of those seeking treatment gain admission, but how long do they have to wait. OTI gets reports from the major urban areas that, depending on the part of the country, type of program, and whether the program charges patient fees, many programs serving the hard-core user are operating at over capacity and residential programs state that waiting time for admission can be as high as year. OTI has no way of verifying these claims, but we have seen a steady erosion in the quality of programs as they attempt to meet the treatment demands of drug abusers. Many outpatient programs claim that they just keep admitting drug abusers regardless of its effect on quality under the belief that something is better than nothing. OTI is just as concerned about the slide in quality as it is in the limitations on access to treatment. Of course, we expect this situation to improve with the nearly doubling of the Federal funding for drug treatment programs contained in the FY 1990 block grant. In addition, OTI will be funding a limited number of projects focused on improving drug treatment practices.

SUCCESS OF DRUG TREATMENT PROGRAMS

Mr. Pursell: What percentage of crack, cocaine, and other hard-core drug addicts who enter drug treatment programs successfully stay off drugs following completion of the program?

Dr. Schuster: There is little data on treatment outcomes for crack cocaine addicts because of the relative recency of the onset of crack use and the lack of developed pharmacotherapy. However, it may not be accurate to portray those entering treatment with a primary cocaine problem as "hard-core". This drug is used by all strata of society and most individuals tend to get into trouble with it relatively quickly. Research has shown that those who complete drug-free treatment programs are more successful at remaining abstinent than those who drop out prematurely. For all types of treatment programs, length of time in treatment is related to positive treatment outcomes.

Relapse to drug use by opiate addicts is most likely to occur in the first 3 months following treatment. About 27 percent of opiate addicts included in Drug Abuse Research Project (DARP) relapsed to daily opiate use in the first 3 months following treatment and a total of 44 percent relapsed within 3 years after treatment. Significantly poorer outcomes resulted from treatment episodes shorter than 90 days, and the percentage with favorable outcomes improved in direct proportion to the length of time spent in treatment beyond 90 days.

The Drug Abuse Treatment Outcome Study (DATOS) was begun by NIDA in 1989 to provide a comprehensive understanding of treatment outcomes for clients entering treatment with varied patterns of drug abuse, and experiencing varied types and durations of treatment. This study will yield valuable information and suggest strategies for improving treatment.

Mr. Pursell: How many times does the typical abuser enter treatment programs before he or she is rehabilitated?

Dr. Schuster: In the Drug Abuse Research Project (DARP), an average of 6 program admissions were reported by each opiate addict in a 12-year follow-up study. This study followed patients who were admitted to treatment from 1969 to 1974. Because of changes in the characteristics of both drug users and drug abuse treatment programs, NIDA began a major study in 1989, the Drug Abuse Treatment Outcome Study (DATOS), to provide more updated, and more comprehensive, information on the use of different types of treatment services by various types of drug abusers. A second study, modeled on this, will begin in FY 1990 and provide information on adolescents who use drug abuse treatment services.

It is important to realize that drug abuse is a chronic, relapsing disease that requires a continuing commitment to the care of the affected individual in order to achieve an effective outcome. Drug abuse treatment can and does work to eliminate illicit drug abuse, but it most often requires the proper combination of treatment, follow-up supervision, and after-care, relapse prevention, and self-help support groups.

Mr. Pursell: Do addicts typically quit a program in the middle of the rehabilitation program?

Dr. Schuster: The majority of dropouts occur soon after entry into treatment. From 5 to 25 percent drop out of treatment in the first 30 days. Methadone maintenance has the best retention (50 - 60 percent), while therapeutic community and drug-free outpatient programs have much poorer retention rates. In early research on publicly-funded treatment, relatively few addicts completed treatment. The Drug Abuse Research Project (DARP) studies, which collected data on clients entering treatment in the early 1970s, showed from 12 to 22 percent completed treatment. Retention rates for treatment programs of relatively short duration, such as the private 28-day residential treatment programs, are not known at this time. However, the Drug Abuse Treatment Outcome Study (DATOS) should provide data on current rates of retention for private and public treatment programs. This study was begun in 1989 and will collect data on 20,000 individuals coming into five different types of treatment modalities in 50 treatment programs. This study will provide important information on the effectiveness of treatment programs and the retention rats of drug abuse clients in different types of programs.

RURAL MENTAL HEALTH

Mr. Weber: As you know, mental health issues are particularly important in rural areas. Recent surveys have show that farm families rank stress as their 2nd most significant health concern, and more than 1 in 5 rural residents report significant levels of depression. Some rural areas, including some in my district, have seen these symptoms erupt into one of their most tragic manifestations - teenage suicide.

Last year, this committee expressed concerns about the need to address the problems of mental illness in rural America. What special initiatives has the institute undertaken to address these problems?

Dr. Judd: In response to these concerns the NIMH has created an Office of Rural Mental Health Research (ORMHR) by expanding the purview of the Associate Director for Special Populations, to include persons living in rural areas.

The ORMHR has provided leadership in developing a Research Announcement "Research on Mental Disorders in Rural Populations" which is intended to stimulate research on mental disorders as they occur in Americans living in rural areas. The announcement encourages three types of applications, 1) traditional research grant applications for specific studies (regular research grants (R01), small grants (R03), and First Independent Research Support and Transition (FIRST) Awards (R29)); 2) research demonstration grants (R18); and 3) applications to establish a research center (P50). In addition, all new Requests for Applications (RFAs) and Research Announcements (RAs) issued by NIMH research program divisions incorporate the following notice to applicants: "Special encouragement is given to applicants for grants under this announcement to undertake studies on issues related to rural mental health or persons living in rural areas."

ORMHR has initiated liaison with the Office of Rural Health Policy as a step toward collaboration and coordination of activities. Inquiries related to rural mental health concerns are being received and processed by ORMHR as appropriate.

ORMHR will coordinate technical assistance activities related to the research announcement--Research on Mental Disorders in Rural Populations.

FIELD HEARING ON MENTAL HEALTH IN RURAL AMERICA

Mr. Weber: As you know, on April 12, the National Advisory Mental Health Council and the National Mental Health Leadership Forum will be holding a special field hearing on Mental Illness in Rural America. That hearing will be held in Marshall, Minnesota, which is in my district, so I have the pleasure of being the host Congressman.

First, could you explain to our committee your relationship to this hearing and update us on how preparations for the hearing are progressing?

Dr. Judd: The hearing is being conducted by the National Advisory Mental Health Council and the National Mental Health Leadership Forum. The National Advisory Mental Health Council, which I chair, is a twelve-member advisory body established by Congress and consisting of experts in the fields of health, science, and public policy relevant to the activities of the National Institute of Mental Health. The Council members are appointed by the Secretary of the Department of Health and Human Services, and are responsible for advising the National Institute of Mental Health on programs and policies of the Institute for the promotion of mental health throughout the United States.

The National Mental Health Leadership Forum is a confederation of 20 professional, scientific, and consumer organizations representing 1.5 million members who are concerned with the mentally ill and with the major health issues facing this nation. Its primary objective is to raise the mental illnesses to a position on the Nation's health agenda that is commensurate with the prevalence and the enormity of the toll these diseases take on the Nation's health and economic well-being.

In December 1989, representatives of the Leadership Forum approached the National Advisory Mental Health Council with a request that, as part of its national leadership function, the Advisory Council join forces with the Forum in cosponsoring a series of national hearings to assess the state of public awareness about rural mental health, child and adolescent disorders, and urban mental health focusing on the homeless. The Council unanimously agreed to collaborate with the Forum in this effort. The hearings, modeled after a similar effort by the National Cancer Institute, represent an area of major new public action for both organizations and are consistent with the Advisory Council's responsibility to make information on health promotion available to the public.

A Steering Committee of the Council and Forum has been established for purposes of making key policy decisions concerning the structure of and the major issues to be addressed at the hearings and its accompanying town meeting. Members of this subcommittee include: L. Patt Franciosi, R.N., M.S., President, National Mental Health Association; Dennis R. Jones, M.S.W., M.B.A., Commissioner, Texas Department of Mental Health and Mental Retardation; Co-Chairpersons, Ms. Norma Lagomarsino, member of the NIMH National Advisory Mental Health Council; and Ms. Laurie Flynn, Executive Director, National Alliance for the Mentally Ill and member of the National Mental Health Leadership Forum.

The Council and Forum requested support from the NIMH for a small number of personnel and financial support for the logistics and technical planning of the hearings to which the Institute agreed. Thus, a small number of NIMH staff with the support of a logistics contract (including media experts) are assisting the Council and Forum in preparing for the hearings.

The Steering Committee, in conjunction with other members of the Forum and Council selected four issues of particular salience to rural mental health, and they will be addressed by four panels of witnesses, each providing testimony on these issues. The panels will focus on: (1) teen age suicide, (2) mental health concerns that are unique to rural America, (3) depression and (4) the role that stigma plays in the ability of people with mental disorders to find access to appropriate care and to function as members of the community. The witnesses will represent patients and family members, consumers, clergy, public officials, civic leaders, mental health professionals and providers. Any other interested individual or organization may submit written testimony at the hearing for inclusion in the hearing record.

The planned approach is to listen and learn from the local citizenry about the multitude of mental health problems that are unique to their immediate region and their views concerning what kinds of activities would be helpful in alleviating these severe problems. Thus, the hearing and the town meeting have been structured to inform the Advisory Council and Forum about local and regional mental health activities, to increase public awareness of programs relevant to rural mental health, and to identify areas where more needs to be done.

In planning the above mentioned activities, the Council and the Forum have been in contact with numerous local citizens, a variety of state and local elected officials, civic leaders, and officials from Southwestern State University who have been most cooperative in helping to organize the logistics and in focusing the hearings and town meeting on the most salient mental health issues in the region. Witnesses have been drawn from several rural states.

The Advisory Council and Forum have also apprised the Senate Rural Health Caucus and the Congressional Rural Health Care Coalition about the hearings and the town meeting. Also, in addition to the witnesses, approximately 1,200 invitations have been sent to citizens through the region inviting them to come and speak at the town meeting.

Mr. Weber: I understand there is some discussion among the planners of this hearing as to the format it should take - basically, as to whether the hearing should be similar to one we are having this afternoon where the exchange is between a panel and expert witnesses, or whether there should be a town-meeting where the general public can exchange views and concerns with mental health professionals.

I feel strongly that the public should be given a chance to express its concerns directly to mental health professionals, and that there should be an exchange of ideas and concerns rather than a series of presentations. As you know, those of us in rural areas have always make considerable and usually very successful use of what might be termed "non-scientific" methods of support such as family and faith to deal with emotional problems. I think both the scientific community and the public could benefit by an exchange of views on this subject.

What are your views on the format of the hearing, do think the hearings should be basically like the hearing we are having this afternoon, or should the public be further included through a town-meeting type format?

Dr. Judd: From the very beginning, the National Advisory Mental Health Council and the National Mental Health Leadership Forum have planned to conduct a hearing with an interactive format. In fact, this will be both a formal hearing and a town meeting. The witnesses testifying at both events are from rural America, and include consumers, family members, patients, clergy, local mental health officials, and local and regional mental health service providers. These witnesses will present their views on mental health issues from the perspective of rural Americans. The testimony of these witnesses will be used to inform members of the Council and the Forum, who will be acting as hearing officers and will be receiving this information fundamentally as listeners rather than as expert advisors.

Although this format is atypical of the traditional Congressional hearing format (i.e., expert scientific witnesses appearing before Congress), it is hoped that this format will encourage rural Americans to present their experiences and views on mental health issues, promoting greater awareness of these issues from the perspective of those closest to the problem.

To provide an opportunity for more people to be heard on a wider array of issues, a town meeting will take place concurrent with the hearing. The town meeting has been designed to encourage additional viewpoints from local and regional mental health professionals and consumers.

The Council and Forum expect to gain considerable information and knowledge from the participants in the town meeting. The open format of the town meeting should encourage issue development, problem identification, and the delineation of local, innovative strategies to overcome barriers to the treatment of mental illness in rural America.

RURAL MENTAL HEALTH INITIATIVE

Mr. Weber: How will the information learned from this initiative be used to address problems of mental illness in rural populations?

Dr. Judd: A major goal of the National Mental Health Advisory Council and the National Mental Health Leadership Forum in sponsoring these hearings is to make public the major mental health issues facing rural America. The testimony provided in the hearing, and the views and opinions expressed at the town meeting, are a critical ingredient in making more widely known the unique mental health problems of rural America, the barriers to appropriate care for those in rural areas who suffer from mental illness, and the successful approaches that have been developed.

The hearing will make this information available to a wide audience including health and mental health professionals, consumers, religious leaders, public officials, advocates, and other members of the public. Members of the National Mental Health Leadership Forum include national mental health organizations with extensive networks of state and local affiliates. Through these networks, the information which flows from the hearing and town meeting will be made available to rural Americans across the nation.

Perhaps the most important information to be disseminated through the hearing is the success stories--the experiences of individuals who have managed to overcome mental illness despite the significant infrastructure barriers that exist in rural America. More information needs to be made public on successful strategies for outreach and treatment in areas that lack appropriately trained mental health professionals, where care is often inaccessible, where financing and coverage for services is inadequate, and where the stigma that surrounds mental illness is pervasive.

To further the dissemination of this information, NIMH stands ready to assist the Council and the Forum in any way it can.

A second way in which this initiative will be used to address the problems of mental illness in rural populations is by increasing awareness among members of the Council and Forum themselves. Informed by the testimony of consumers, health and mental health professionals, and religious leaders, members of the Council and Forum will have a greater appreciation and understanding of the unique issues of mental health in rural America and will be able to better develop follow-up activities for NIMH and other mental health organizations. In fulfilling its advisory role to NIMH, the Council will reflect a greater awareness of these issues in its recommendations to NIMH. In this way, the mental health needs of rural Americans can also be incorporated more fully into the research, services research, training, and services systems mission of the National Institute of Mental Health.

MENTAL DISORDERS IN CHILDREN AND ADOLESCENTS

Mr. Weber: Last year, our committee expressed concern about the number of children in this country suffering from a diagnosable mental illness, yet not receiving adequate treatment.

Do you feel there could be more quality research in the field of pediatric mental health, and are there enough funds to do so?

Dr. Judd: Yes, the opportunities for quality research in the area of child and adolescent mental health are enormous. This is true of almost all areas of research. Advances in understanding specific disorders readies the field for clinical advances in epidemiology, treatment research, and prevention. Advances in the neurosciences, genetics and behavioral research can help clarify the origins of these disorders. And clinical services research and service systems research will improve the delivery of needed services to young people. Of course, in all of these areas, we also need more skilled, highly specialized investigators. So developing rewarding research careers in child and adolescent mental health research will remain a pressing priority.

The President's budget request includes $111.9 million for research in the area of child and adolescent mental health.

Mr. Weber: As you know, our committee just received copies of the "National Plan for Research on Child and Adolescent Mental Disorders" which was prepared by the National Advisory Mental Health Council of the National Institute of Mental Health (NIMH). Our committee requested this report to serve as a blueprint for carrying out the Institute of Medicine's recent major study on mental disorders in children and adolescents.

Could you briefly describe the resources cited in the Institute of Medicines report on child and adolescent mental disorders - both manpower and funding - to fully carry out its recommendations?

Dr. Judd: The Institute of Medicine report recommended $111 million for the first year and $198.5 million in the fifth year. The report does not estimate staffing levels for its recommendations.

Mr. Weber: Are these same levels of resources contained in the National Plan we recently received?

Dr. Judd: In FY 1991, the National Plan for Research on Child and Adolescent Disorders calls for $152.5 million, the President's Budget includes $111.9 million. The National Plan for Research on Child and Adolescent Disorders was not completed when the President's 1991 budget was being developed.

JUSTIFICATION OF THE BUDGET ESTIMATES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION

Alcohol, Drug Abuse, and Mental Health

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Alcohol, Drug Abuse and Mental Health

For carrying out the Public Health Service Act with respect to mental health, drug abuse, alcohol abuse and alcoholism, section 3521 of Public Law 100-690, and the Protection and Advocacy for Mentally Ill Individuals Act of 1986, [$1,934,177,000, of which $7,359,000 for homeless activities shall be available for obligation for the period October 1, 1990 through September 30, 1991, and, of which $198,000][1] *$2,824,152,000; of which $1,292,775,000 shall be available for block grants under Subpart 1, Part B of Title XIX of the Public Health Service Act, of which $1,192,851,000 shall be allotted to and expended by States in accordance with the same criteria and limitations as were applied to such grants for fiscal year 1990, of which $89,924,000 shall be allotted to the States in proportion to the amount they receive from the $1,192,851,000 and must be used solely for the purpose of drug abuse programs and activities, and of which $10,000,000 shall be used for carrying out Section 1911 (b) for drug abuse data collection and evaluation programs;*[2] *and of which $3,126,000* for renovation of government owned or leased intramural research facilities shall remain available until expended. *(Department of Health and Human Services Appropriations Act, 1990.)*

[For carrying out activities to fight the war on drugs including substance abuse research, treatment, and prevention, $727,000,000: *Provided*, that of this amount $415,000,000 shall be provided for block grants to States under title XIX of the Public Health Service Act to be used exclusively for substance abuse activities and shall remain available for obligation by the States until March 31, 1991, and such obligated funds shall remain available for expenditure by the States until March 31, 1992; *Provided further*, that of this amount $40,000,000 shall be available for treatment waiting period reduction grants, if authorized in law.] *(Department of Transportation and Related Agencies Appropriations Act, 1990.)* [3/]

Explanation of Language Change

[1/] The $7,359,000 referenced in this clause is available for obligation during FY 1991 rendering this language unnecessary.

[2/] This language requires allocation of the same dollar level for mental health and substance abuse programs to each State in FY 1991 as it received in FY 1990; proportionally allocates the additional drug abuse money to each State; and increases the ADAMHA five percent set aside by $10,000,000 to be used for data collection on drug abuse programs only.

[3/] Substance Abuse activities funded by the FY 1990 Department of Transportation appropriation have been included in the total request.

Language Analysis

"...$2,824,152,000 of which $1,292,755,000 shall be available for block grants under Subpart 1, Part B of Title XIX of the Public Health Service Act, of which $1,192,851,000 shall be allotted to and expended by States in accordance with the same criteria and limitations as were applied to such grants for fiscal year 1990,..."

This language would provide each State with the same dollar level for mental health programs and substance abuse programs that it received in FY 1990.

"...of which of which $89,924,000 shall be allotted to the States in proportion to the amount they receive from the $1,192,851,000 and must be used solely for the purpose of drug abuse programs and activities;..."

This language adds money to be distributed to the States for drug abuse purposes only. The money will be given to each State in proportion to the percent of the $1,192,851,000 they received in FY 1990.

These clauses allow the additional money requested in FY 1991 for drug abuse to be used exclusively for those programs rather than be allocated to both mental health and substance abuse programs as required by the intra-State formula in the authorizing legislation. They also prevent the small shift of money to urban States and away from rural States which would occur if the FY 1991 formula were used as it appears in the authorizing legislation for the ADMS Block Grant.

"...and of which $10,000,000 shall be used for carrying out Sec. 1911 (b) for drug abuse data collection and evaluation programs;..."

This language provides that drug abuse data collection and evaluation programs receive an increase of $10,000,000 in order to implement the President's Drug Strategy.

4

Alcohol, Drug Abuse, and Mental Health
Amounts Available for Obligation

	1989 Actual	1990 Estimate	1991 Estimate
Appropriation:			
Labor/HHS	$1,845,712,000	$1,926,818,000	$2,824,152,000
Advance Funding for Homeless	---	---	+7,359,000
Department of Transportation	---	+727,000,000	---
Enacted administrative reduction (L/HHS Approp.):			
Sec. 518 salaries & expenses	---	-1,135,000	---
Sequester order	---	-26,745,000	---
Subtotal, adjusted appropriation	1,845,712,000	2,625,938,000	2,831,511,000
Real transfer:			
Program Operations, HRSA	-2,150,000	---	---
Subtotal, adjusted budget authority	1,843,562,000	2,625,938,000	2,831,511,000
Unobligated balance, start of year	+426,000	+503,000	---
Unobligated balance, end of year	-503,000	---	---
Unobligated balance, lapsing	-369,000	---	---
Total obligations	$1,843,116,000	$2,626,441,000	$2,831,511,000

Alcohol, Drug Abuse, and Mental Health Administration
Summary by Mechanism--Total
(Dollars in thousands)

	1989 Actual		1990 Appropriation		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Project Grants:								
Continuations...........	1,267	$229,514	1,470	$284,953	1,470	$284,953	1,799	$370,897
Admin. Supplements......	(46)	2,071	(20)	1,735	(20)	1,735	(25)	1,829
New/Competing Combined..	778	138,403	872	165,291	872	165,291	604	121,004
Subtotal, RPG.........	2,045	369,988	2,342	451,979	2,342	451,979	2,403	493,730
Treatment Outcome Research	8	2,282	24	7,803	24	7,803	25	8,335
Research Centers..........	67	66,505	81	87,085	81	87,085	83	90,712
Other Research:								
Research Career Programs.	273	17,094	323	24,850	323	24,850	324	25,669
Cooperative Agreements...	39	10,408	32	13,096	32	13,096	36	16,090
Instrumentation Grants...	80	2,012	65	2,050	65	2,050	63	1,986
Small Grants.............	87	2,836	36	2,556	36	2,556	39	2,860
Subt., Other Research...	479	32,350	456	42,552	456	42,552	462	46,605
Total, Research Grants	2,599	471,125	2,903	589,419	2,903	589,419	2,973	639,382
Research Training:	FTTP		FTTP		FTTP		FTTP	
Individual Awards........	174	3,096	256	5,010	256	5,010	289	5,972
Institutional Awards.....	1,142	24,361	1,197	26,337	1,197	26,337	1,244	28,166
Total, Res Training...	1,316	27,457	1,453	31,347	1,453	31,347	1,533	34,138
	No.		No.		No.		No.	
Res. and Dev. Contracts...	106	36,571	126	45,297	126	43,097	125	53,408
Total, Extramural Res...		532,871		658,260		656,060		718,593
	FTE		FTE		FTE		FTE	
Intramural Research.......	782	102,635	797	118,526	797	117,026	810	125,508
Res. Mgmt. & Support......	730	68,264	818	74,594	818	78,294	880	88,181
Total, Research (FTE)...	(1,512)	706,052	(1,615)	859,183	(1,615)	859,183	(1,690)	940,617
Demonstrations:	No.		No.		No.		No.	
Mental Health (CSP).....	178	25,920	174	28,303	174	28,303	157	26,862
Mental Health (Homeless)	11	4,594	26	6,038	26	6,038	26	6,006
Drug Abuse.............	94	97,885	148	128,152	148	128,152	126	109,934
Alcohol (Homeless)......	10	4,545	18	16,378	18	16,378	18	9,498 a/
Subtotal, Demos.......	293	132,944	366	178,871	366	178,871	327	152,300
Protection & Advocacy.....	56	12,844	56	14,001	56	14,001	56	8,000
Clinical Training.........	135	12,844	158	13,534	158	13,534	65	5,000
Subst. Abuse Prevention:								
Demonstrations..........	249	55,419	598	155,608	598	155,608	786	220,253
Training................	13	5,000	59	26,035	59	26,035	59	26,894
	FTE		FTE		FTE		FTE	
Prev. Mgmt. & Support...	64	9,434	102	11,794	102	11,794	135	14,745
Subtotal, OSAP (FTE)..	(64)	69,853	(102)	193,437	(102)	193,437	(135)	261,892
Treatment:	No.		No.		No.		No.	
Treatment Programs......	29	75,000	380	133,640	380	133,640	361	117,654
	FTE		FTE		FTE		FTE	
Trmt. Mgmt. & Support...	—	—	(27)	2,138	(27)	2,138	(50)	4,055
Grants to States:	No.		No.		No.		No.	
ADMS Block Grant......	61	805,594	60	1,192,851	60	1,192,851	60	1,292,775 a/
Homeless Grants.......	56	14,128	56	27,813	56	27,813	56	33,703
State Planning........	57	4,730	—	—	—	—	—	—
Subt., Grants to St.	174	824,452	116	1,220,664	116	1,220,664	116	1,326,478
Subtotal, OTI.....	203	899,452	496	1,356,442	496	1,356,442	477	1,448,187
Buildings & Facilities....	—	198	—	196	—	196	—	3,126
Off. of the Administrator:	FTE		FTE		FTE		FTE	
Prog. Mgmt. & Support...	167	7,512	168	8,440	168	8,440	173	10,494
SEH Worker's Comp. Fund.	—	1,863	—	1,834	—	1,834	—	1,895
Subtotal, OA (FTE)....	(167)	9,375	(168)	10,274	(168)	10,274	(173)	12,389
Total, ADAMHA.......		1,843,562		2,625,938		2,625,938		2,831,511
FTE...............		1,743		1,912		1,912		2,048

a/ Includes advance funding for Homeless of $7,359 thousand—$455 for Alcohol Homeless Demonstrations and $6,904 for MHSH Block Grant.

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Alcohol, Drug Abuse, and Mental Health Administration
Summary by Mechanism--Non-AIDS
(Dollars in thousands)

	1989 Actual		1990 Appropriation		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Project Grants:								
Continuations..........	1,168	206,902	1,349	252,746	1,349	252,746	1,565	308,310
Admin. Supplements......	(39)	1,808	(20)	1,735	(20)	1,735	(25)	1,829
New/Competing Combined..	704	120,916	713	127,645	713	127,645	508	96,858
Subtotal, RPG.........	1,872	329,626	2,062	382,126	2,062	382,126	2,073	406,997
Treatment Outcome Research	8	2,282	24	7,803	24	7,803	25	8,335
Research Centers..........	56	49,034	67	64,186	67	64,186	69	67,733
Other Research:								
Research Career Programs.	265	16,653	303	23,528	303	23,528	295	23,717
Cooperative Agreements...	38	10,293	28	10,771	28	10,771	28	10,795
Instrumentation Grants...	80	2,012	65	2,050	65	2,050	63	1,986
Small Grants............	83	2,682	34	2,411	34	2,411	33	2,411
Subt., Other Research..	466	31,640	430	38,760	430	38,760	419	38,909
Total, Research Grants	2,402	412,582	2,583	492,875	2,583	492,875	2,586	521,974
Research Training:	FTTP		FTTP		FTTP		FTTP	
Individual Awards........	169	2,960	225	4,259	225	4,259	244	4,748
Institutional Awards.....	1,058	22,190	1,063	22,750	1,063	22,750	1,077	23,715
Total, Res Training...	1,227	25,150	1,288	27,009	1,288	27,009	1,321	28,463
	No.		No.		No.		No.	
Res. and Dev. Contracts...	98	33,019	108	37,710	108	35,510	103	39,561
Total, Extramural Res...		470,751		557,594		555,394		589,998
	FTE		FTE		FTE		FTE	
Intramural Research.......	756	95,006	759	105,880	759	104,380	760	111,676
Res. Mgmt. & Support......	678	57,844	733	62,617	733	66,317	785	75,129
Total, Research (FTE)...	(1,434)	623,601	(1,492)	726,091	(1,492)	726,091	(1,545)	776,803
Demonstrations:	No.		No.		No.		No.	
Mental Health (CSP).....	178	25,920	174	28,303	174	28,303	157	26,862
Mental Health (Homeless)	11	4,594	26	6,038	26	6,038	26	6,006
Drug Abuse..............	11	7,000	74	46,597	74	46,597	74	46,588
Alcohol (Homeless)......	10	4,545	18	16,378	18	16,378	18	9,498 [a]
Subtotal, Demos.......	210	42,059	292	97,316	292	97,316	275	88,954
Protection & Advocacy.....	56	12,844	56	14,001	56	14,001	56	8,000
Clinical Training.........	135	12,844	158	13,534	158	13,534	65	5,000
Subst. Abuse Prevention:								
Demonstrations..........	249	55,419	598	155,608	598	155,608	786	220,253
Training................	13	5,000	59	26,035	59	26,035	59	26,894
	FTE		FTE		FTE		FTE	
Prev. Mgmt. & Support...	64	9,434	102	11,794	102	11,794	135	14,745
Subtotal, OSAP (FTE)..	(64)	69,853	(102)	193,437	(102)	193,437	(135)	261,892
Treatment:	No.		No.		No.		No.	
Treatment Programs......	29	75,000	380	133,640	380	133,640	361	117,654
	FTE		FTE		FTE		FTE	
Trmt. Mgmt. & Support...	---	---	(27)	2,138	(27)	2,138	(50)	4,055
Grants to States:	No.		No.		No.		No.	
ADMS Block Grant......	61	805,594	60	1,192,851	60	1,192,851	60	1,292,775
Homeless Grants.......	56	14,128	56	27,813	56	27,813	56	33,703 [a]
State Planning........	57	4,730	---	---	---	---	---	---
Subt., Grants to St.	174	824,452	116	1,220,664	116	1,220,664	116	1,326,478
Subtotal, OTI.....	203	899,452	496	1,356,442	496	1,356,442	477	1,448,187
Buildings & Facilities....	---	198	---	196	---	196	---	1,526
Off. of the Administrator:	FTE		FTE		FTE		FTE	
Prog. Mgmt. & Support...	165	7,512	165	8,440	165	8,440	170	9,585
SEH Worker's Comp. Fund.	---	1,863	---	1,834	---	1,834	---	1,895
Subtotal, OA (FTE)....	(165)	9,375	(165)	10,274	(165)	10,274	(170)	11,480
Total, ADAMHA.......		1,670,226		2,411,291		2,411,291		2,601,842
FTE...............		1,663		1,786		1,786		1,900

[a] Includes advance funding for Homeless of $7,389 thousand—$485 for Alcohol Homeless Demonstrations and $6,904 for MH Block Grant.

Alcohol, Drug Abuse, and Mental Health Administration
Summary by Mechanism—HIV/AIDS
(Dollars in thousands)

	1989 Actual		1990 Appropriation		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Project Grants:								
Continuations...........	99	22,612	121	32,207	121	32,207	234	62,587
Admin. Supplements......	(7)	263	---	---	---	---	---	---
New/Competing Combined..	74	17,487	159	37,646	159	37,646	96	24,146
Subtotal, RPG.........	173	40,362	280	69,853	280	69,853	330	86,733
Research Centers..........	11	17,471	14	22,899	14	22,899	14	22,979
Other Research:								
Research Career Programs.	8	441	20	1,322	20	1,322	29	1,952
Cooperative Agreements...	1	115	4	2,325	4	2,325	8	5,295
Small Grants.............	4	154	2	145	2	145	6	449
Subt., Other Research..	13	710	26	3,792	26	3,792	43	7,696
Total, Research Grants	197	58,543	320	96,544	320	96,544	387	117,408
Research Training:	FTTP		FTTP		FTTP		FTTP	
Individual Awards........	5	136	31	751	31	751	45	1,224
Institutional Awards.....	84	2,171	134	3,587	134	3,587	167	4,451
Total, Res Training...	89	2,307	165	4,338	165	4,338	212	5,675
	No.		No.		No.		No.	
Res. and Dev. Contracts...	8	3,552	18	7,587	18	7,587	22	13,847
Total, Extramural Res...		64,402		108,469		108,469		136,930
	FTE		FTE		FTE		FTE	
Intramural Research.......	26	7,629	38	12,646	38	12,646	50	13,832
Res. Mgmt. & Support......	52	10,420	85	11,977	85	11,977	95	13,052
Total, Research.........	(78)	82,451	(123)	133,092	(123)	133,092	(145)	163,814
	No.		No.		No.		No.	
Drug Abuse Demonstrations.	83	90,885	74	81,555	74	81,555	52	63,346
Buildings & Facilities....	---	---	---	---	---	---	---	1,600
Off. of the Administrator:	FTE		FTE		FTE		FTE	
Prog. Mgmt. & Support...	(2)	---	(3)	---	(3)	---	(3)	909
Total, ADAMHA.......		173,336		214,647		214,647		229,669
FTE................		80		126		126		148

Alcohol, Drug Abuse, and Mental Health
Summary of Changes

1990 Estimated budget authority..................................	2,625,938,000
1991 Estimated budget authority..................................	2,831,511,000
Net change..	+205,573,000

	1990 Current Estimate Base		Change from base	
	Pos. (FTE)	Budget Authority	Pos. (FTE)	Budget Authority
Increases:				
A. Built-in:				
1. Jan. 1990 pay annualization........	---	$99,912,000	---	+$803,000
2. Jan. 1991 pay increase.............	---	99,912,000	---	+3,104,000
3. Within-grade increases.............	---	99,912,000	---	+1,290,000
4. Increased PHS Service and Supply Fund....................	---	3,894,000	---	+193,000
5. Increased FTS costs................	---	791,000	---	+26,000
6. Increased NIH Management and Service & Supply funds costs.......	---	49,656,000	---	+1,916,000
7. Increased cost for Federal Employee Retirement System.........	---	3,102,000	---	+284,000
8. Working Capital Fund transfer......	---	784,000	---	+10,000
9. Increased Rental Payments to GSA...	---	3,504,000	---	+316,000
10. Increased Social Security (FICA)...	---	1,477,000	---	+242,000
11. Increased St. Elizabeths Workers' Compensation Fund costs............	---	1,834,000	---	+61,000
12. Increased cost of non-pay items including laboratory materials and other supplies.....................	---	56,932,000	---	+1,880,000
13. Annualization of 162 new positions in FY 1990.........................	162 (88)	7,000,000	--- (+74)	+6,032,000
14. Restoration of program cuts used to absorb Jan. 1990 pay raise.........	---	99,912,000	---	+2,407,000
15. One extra day of pay...............	---	99,912,000	---	+359,000
Subtotal.........................			(+74)	+18,923,000
B. Program:				
1. General Mental Health:				
a. Extramural Research Grants - provides a 6.6% increase over 1990.............................	---	304,693,000	---	+20,010,000
b. Research Training - provides a 6.4% increase over 1990.........	---	24,249,000	---	+1,552,000
c. HIV/AIDS Extramural Research Contracts - provides a 3.3% increase over 1990.............	---	$612,000	---	+$20,000

Alcohol, Drug Abuse, and Mental Health
Summary of Changes - continued

	1990 Current Estimate Base		Change from base	
	Pos. (FTE)	Budget Authority	Pos. (FTE)	Budget Authority
2. Drug Abuse:				
a. Extramural Research Grants - provides a 15.1% increase over 1990............................	---	169,351,000	---	+25,600,000
b. Research Training - provides a 26.1% increase over 1990........	---	3,926,000	---	+1,024,000
c. Extramural Research Contracts - provides a 34.4% increase over 1990............................	---	29,846,000	---	+10,262,000
d. Intramural Research - increase of 12 FTEs, plus expanded research on drug abuse treatment..	101 (101)	21,397,000	+12 (+12)	+1,720,000
e. Research Management & Support - increase of 35 FTEs, plus increased support of data collection activities...........	296 (296)	27,062,000	+35 (+35)	+2,900,000
3. Alcoholism:				
a. Extramural Research Grants - provides a 4.9% increase over 1990............................	---	107,572,000	---	+5,249,000
b. Research Training - provides a 6.8% increase over 1990.........	---	3,172,000	---	+215,000
c. Extramural Research Contracts - provides a 0.5% increase over 1990............................	---	5,509,000	---	+29,000
4. Treatment Outcome Research - provides a 6.8% increase over 1990.	---	7,803,000	---	+532,000
5. Substance Abuse Prevention:				
a. Demonstrations - provides a 41.6% increase over 1990........	---	155,608,000	---	+64,741,000
b. Clinical Training - provides a 3.3% increase over 1990.........	---	26,035,000	---	+859,000
c. Prevention Management & Support- increase of 10 FTEs.............	102 (102)	11,794,000	+10 (+10)	+600,000
6. Treatment Improvement:				
a. Treatment Improvement Programs - provides a 69.8% increase over 1990............................	---	69,295,000	---	+48,387,000
b. Grants to States - provides an 8.7% increase over 1990.........	---	1,220,664,000	---	+105,814,000

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Alcohol, Drug Abuse, and Mental Health
Summary of Changes - continued

	1990 Current Estimate Base		Change from base	
	Pos. (FTE)	Budget Authority	Pos. (FTE)	Budget Authority
7. Buildings and Facilities - One-time increase in "no-year funds" for repair and maintenance of research buildings and facilities...........	---	$196,000	---	+$2,930,000
8. Office of the Administrator:				
a. Program Management and Support - increase of 5 FTEs, plus HIV/AIDS increases for: non-pay costs of HIV/AIDS Advisory Board; and contract costs..................	168 (168)	10,274,000	+5 (+5)	+1,209,000
Subtotal......................			+62 (+62)	+293,653,000
Total increases.............			+62 +(136)	+312,576,000
Decreases:				
A. Program:				
1. General Mental Health:				
a. Extramural Research Grants - Program absorption of 1/2 of Jan. 1991 pay increase..........	---	304,693,000	---	-802,000
b. Demonstrations - reduction in the adult CSP and homeless demonstration programs after substantial increases in FY 1990..........................	---	34,341,000	---	-1,473,000
c. Protection and Advocacy - reduction to continue phaseover of program......................	---	14,001,000	---	-6,001,000
d. Clinical Training - reduction to continue phaseover of program...	---	13,534,000	---	-8,534,000
2. Drug Abuse:				
a. Extramural Research Grants - Program absorption of 1/2 of Jan. 1991 pay increase..........	---	169,351,000	---	-322,000
b. Demonstrations - reduction due to completion of portions of a major NIDA HIV/AIDS outreach demonstration....................	---	128,152,000	---	-18,218,000
3. Alcoholism:				
a. Extramural Research Grants - Program absorption of 1/2 of Jan. 1991 pay increase..........	---	107,572,000	---	-264,000

Alcohol, Drug Abuse, and Mental Health
Summary of Changes - continued

	1990 Current Estimate Base		Change from base	
	Pos. (FTE)	Budget Authority	Pos. (FTE)	Budget Authority
3. Alcoholism (cont'd):				
b. Demonstrations - reduction in the NIAAA/NIDA homeless demonstration program following a major increase in FY 1990.......	---	16,378,000	---	-6,880,000
4. Substance Abuse Prevention				
a. Demonstrations - Program absorption of 1/2 of Jan. 1991 pay increase....................	---	155,608,000	---	-96,000
5. Treatment Improvement:				
a. Treatment Improvement Programs -				
(1) Program absorption of 1/2 of January 1991 pay raise......	---	39,597,000	---	-28,000
(2) Limitation of $100 million authorized under P.L. 100-690 for Waiting List Reduction Grants is exhausted..................	---	64,345,000	---	-64,345,000
Total decreases...........			---	-107,003,000
Net Change..............			+62 (+136)	+205,573,000

Alcohol, Drug Abuse, and Mental Health Administration
Budget Authority by Activity—Total
(Dollars in thousands)

	1989 Actual		1990 Appropriation		1990 Estimate		1991 Estimate	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
1. Mental Health:								
a. Research.............	589	$354,464	597	$413,788	597	$413,788	597	$439,292
b. Res. Mgmt. & Support.	386	39,229	403	40,118	403	40,118	403	42,626
Subtotal, Research.	975	393,693	1,000	453,906	1,000	453,906	1,000	481,918
c. Demonstrations.......	—	30,514	—	34,341	—	34,341	—	32,868
d. Protection & Advocacy	—	12,844	—	14,001	—	14,001	—	8,000
e. Clinical Training....	—	12,844	—	13,534	—	13,534	—	5,000
Subtotal, NIMH...	975	449,895	1,000	515,782	1,000	515,782	1,000	527,786
2. Drug Abuse:								
a. Research.............	97	171,154	101	228,220	101	224,520	113	263,802
b. Res. Mgmt. & Support.	227	19,414	296	23,362	296	27,062	354	33,338
Subtotal, Research.	324	190,568	397	251,582	397	251,582	467	297,140
c. Demonstrations.......	—	97,885	—	128,152	—	128,152	—	109,934
Subtotal, NIDA...	324	288,453	397	379,734	397	379,734	467	407,074
3. Alcoholism:								
a. Research.............	96	109,888	99	134,778	99	134,778	100	141,007
b. Res. Mgmt. & Support.	117	9,621	119	11,114	119	11,114	123	12,217
Subtotal, Research.	213	119,509	218	145,892	218	145,892	223	153,224
c. Demonstrations.......	—	4,545	—	16,378	—	16,378	—	9,498
Subtotal, NIAAA..	213	124,054	218	162,270	218	162,270	223	162,722
4. Treatment Outcome Res...	—	2,282	—	7,803	—	7,803	—	8,335
5. Subst. Abuse Prevention:								
a. Demonstrations.......	—	55,419	—	155,608	—	155,608	—	220,253
b. Training.............	—	5,000	—	26,036	—	26,036	—	26,894
c. Prev. Mgmt. & Support	64	9,434	102	11,794	102	11,794	135	14,745
Subtotal, OSAP.....	64	69,853	102	193,437	102	193,437	135	261,892
6. Treatment:								
a. Treatment Programs...	—	75,000	—	133,640	—	133,640	—	117,654
b. Trmt. Mgmt. & Support	—	—	27	2,138	27	2,138	50	4,055
c. Grants to States:								
(1) ADMS Block Grant.	—	806,594	—	1,192,851	—	1,192,851	—	1,292,775
(2) Homeless Grants..	—	14,128	—	27,813	—	27,813	—	33,703
(3) State Planning...	—	4,730	—	—	—	—	—	—
Subt., Grants to St..	—	824,452	—	1,220,664	—	1,220,664	—	1,326,478
Subtotal, OTI......	—	899,452	27	1,356,442	27	1,356,442	50	1,448,187
7. Buildings & Facilities..	—	198	—	196	—	196	—	3,126
8. Off. of the Administrator:								
a. Prog. Mgmt. & Support	167	7,512	168	8,440	168	8,440	173	10,494
b. SEH Worker's Comp....	—	1,863	—	1,834	—	1,834	—	1,895
Subtotal, OA.......	167	9,375	168	10,274	168	10,274	173	12,389
Total, ADAMHA....	1,743	1,843,562	1,912	2,625,938	1,912	2,625,938	2,048	2,831,511

1990 Estimate

2a. & 2b.	Reflects a reorganization that was approved in FY 1989 shifting $1,500,000 from NIDA non-AIDS Intramural Research to NIDA non-AIDS Research Management & Support. In addition, this reflects a $2,200,000 reprogramming request in FY 1990 from NIDA non-AIDS Research and Development Contracts to NIDA non-AIDS Research Management and Support.

1991 Estimate

3c. & 6c.(2)	Includes advance funding for Homeless of $7,359 thousand--$455 for Alcohol Homeless Demonstrations and $6,904 for MHSH Block Grant.

Alcohol, Drug Abuse, and Mental Health Administration
Budget Authority by Activity--Non-AIDS
(Dollars in thousands)

	1989 Actual		1990 Appropriation		1990 Estimate		1991 Estimate	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
1. Mental Health:								
a. Research.............	572	$313,189	572	$351,879	572	$351,879	572	$367,733
b. Res. Mgmt. & Support.	376	32,131	382	33,673	382	33,673	382	36,049
Subtotal, Research.	948	345,320	954	385,552	954	385,552	954	403,782
c. Demonstrations.......	---	30,514	---	34,341	---	34,341	---	32,868
d. Protection & Advocacy	---	12,844	---	14,001	---	14,001	---	8,000
e. Clinical Training....	---	12,844	---	13,534	---	13,534	---	5,000
Subtotal, NIMH...	948	401,522	954	447,428	954	447,428	954	449,650
2. Drug Abuse:								
a. Research.............	96	146,074	98	176,746	98	173,046	98	193,299
b. Res. Mgmt. & Support.	189	16,546	236	18,309	236	22,009	284	27,366
Subtotal, Research.	285	162,620	334	195,055	334	195,055	382	220,665
c. Demonstrations.......	---	7,000	---	46,597	---	46,597	---	46,588
Subtotal, NIDA...	285	169,620	334	241,652	334	241,652	382	267,253
3. Alcoholism:								
a. Research.............	88	104,212	89	127,046	89	127,046	90	132,307
b. Res. Mgmt. & Support.	113	9,167	115	10,635	115	10,635	119	11,714
Subtotal, Research.	201	113,379	204	137,681	204	137,681	209	144,021
c. Demonstrations.......	---	4,545	---	16,378	---	16,378	---	9,498
Subtotal, NIAAA..	201	117,924	204	154,059	204	154,059	209	153,519
4. Treatment Outcome Res...	---	2,282	---	7,803	---	7,803	---	8,335
5. Subst. Abuse Prevention:								
a. Demonstrations.......	---	55,419	---	155,608	---	155,608	---	220,253
b. Training.............	---	5,000	---	26,035	---	26,035	---	26,894
c. Prev. Mgmt. & Support	64	9,434	102	11,794	102	11,794	135	14,745
Subtotal, OSAP.....	64	69,853	102	193,437	102	193,437	135	261,892
6. Treatment:								
a. Treatment Programs...	---	75,000	---	133,640	---	133,640	---	117,654
b. Trmt. Mgmt. & Support	---	---	27	2,138	27	2,138	50	4,055
c. Grants to States:								
(1) ADMS Block Grant.	---	805,594	---	1,192,851	---	1,192,851	---	1,292,775
(2) Homeless Grants..	---	14,128	---	27,813	---	27,813	---	33,703
(3) State Planning...	---	4,730	---	---	---	---	---	---
Subt., Grants to St..	---	824,452	---	1,220,664	---	1,220,664	---	1,326,478
Subtotal, OTI......	---	899,452	27	1,356,442	27	1,356,442	50	1,448,187
7. Buildings & Facilities..	---	198	---	196	---	196	---	1,526
8. Off. of the Administrator:								
a. Prog. Mgmt. & Support	165	7,512	165	8,440	165	8,440	170	9,586
b. SEH Worker's Comp....	---	1,863	---	1,834	---	1,834	---	1,896
Subtotal, OA.......	165	9,375	165	10,274	165	10,274	170	11,480
Total, ADAMHA....	1,663	1,670,226	1,786	2,411,291	1,786	2,411.291	1,900	2,601,842

1990 Estimate

2a. & 2b.	Reflects a reorganization that was approved in FY 1989 shifting $1,500,000 from NIDA Intramural Research to NIDA Research Management & Support. In addition, this reflects a $2,200,000 reprogramming request in FY 1990 from NIDA Research and Development Contracts to NIDA Research Management and Support.

1991 Estimate

3c. & 6c.(2)	Includes advance funding for Homeless of $7,359 thousand--$455 for Alcohol Homeless Demonstrations and $6,904 for MHSH Block Grant.

Alcohol, Drug Abuse, and Mental Health Administration
Budget Authority by Activity—HIV/AIDS
(Dollars in thousands)

	1989 Actual		1990 Appropriation		1990 Estimate		1991 Estimate	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
1. Mental Health:								
a. Research.............	17	$41,275	25	$61,909	25	$61,909	25	$71,559
b. Res. Mgmt. & Support.	10	7,098	21	6,445	21	6,445	21	6,577
Subtotal, Research.	27	48,373	46	68,354	46	68,354	46	78,136
Subtotal, NIMH...	27	48,373	46	68,354	46	68,354	46	78,136
2. Drug Abuse:								
a. Research.............	1	25,080	3	51,474	3	51,474	15	70,503
b. Res. Mgmt. & Support.	38	2,868	60	5,053	60	5,053	70	5,972
Subtotal, Research.	39	27,948	63	56,527	63	56,527	85	76,475
c. Demonstrations.......	---	90,885	---	81,555	---	81,555	---	63,346
Subtotal, NIDA...	39	118,833	63	138,082	63	138,082	85	139,821
3. Alcoholism:								
a. Research.............	8	5,676	10	7,732	10	7,732	10	8,700
b. Res. Mgmt. & Support.	4	454	4	479	4	479	4	503
Subtotal, Research.	12	6,130	14	8,211	14	8,211	14	9,203
Subtotal, NIAAA..	12	6,130	14	8,211	14	8,211	14	9,203
4. Buildings & Facilities..	---	---	---	---	---	---	---	1,600
5. Off. of the Administrator:								
a. Prog. Mgmt. & Support	2	---	3	---	3	---	3	909
Total, ADAMHA....	80	173,336	126	214,647	126	214,647	148	229,669

Alcohol, Drug Abuse and Mental Health
Budget Authority by Object

	1990 Estimate	1991 Estimate	Increase/ Decrease
Total number of full-time permanent positions...............	1,504	1,611	+107
Total compensable workyears: Full-time equivalent employment...	1,912	2,048	+136
Full-time equivalent of overtime and holiday hours.................	12	12	---
Average ES salary....................	$79,122	$81,813	+$2,691
Average GS/GM grade..................	10.35	10.35	---
Average GS/GM salary.................	$37,868	$39,193	+$1,325
Average salary, grades established by PHS Act of 1955 (42 USC 207)...	$43,654	$45,147	+$1,493
Average salary of ungraded positions	$19,849	$20,544	+$695

Personnel Compensation:			
Full-time Permanent...............	$63,123,000	$73,966,000	+$10,843,000
Other than Full-time Permanent....	16,253,000	17,948,000	+1,695,000
Other Personnel Compensation......	2,906,000	3,141,000	+235,000
Special Services Payments.........	2,892,000	3,133,000	+241,000
Total, Personnel Compensation...	85,174,000	98,188,000	+13,014,000
Personnel Benefits: Civilian.......	14,736,000	17,421,000	+2,685,000
Benefits for Former Personnel.......	6,000	6,000	---
Travel & Transportation of Persons..	3,039,000	3,388,000	+349,000
Transportation of Things............	407,000	435,000	+28,000
Rent, Communications and Utilities:			
Rental Payments to GSA............	3,605,000	4,139,000	+534,000
Rent (Non-GSA)....................	627,000	792,000	+165,000
Communications and Utilities......	3,724,000	4,102,000	+378,000

Alcohol, Drug Abuse and Mental Health
Budget Authority by Object - continued

	1990 Estimate	1991 Estimate	Increase/ Decrease
Printing and Reproduction...........	$3,708,000	$4,114,000	+$406,000
Other Services......................	70,177,000	77,401,000	+7,224,000
Project Contracts...................	164,597,000	183,103,000	+18,506,000
Supplies and Materials..............	10,912,000	11,322,000	+410,000
Equipment...........................	9,659,000	10,208,000	+549,000
Grants, Subsidies and Contributions.	2,255,567,000	2,416,892,000	+161,325,000
Total, Budget Authority...........	2,625,938,000	2,831,511,000	+205,573,000

Significant Items in House and Senate Appropriation Committee Reports

Item:	Action Taken or to be Taken:
1990 House Report No. 101-172	
Eating Disorders	
1. ...The Committee requests that the NIMH work with the health professionals community to promote better understanding of eating disorders and to enhance early detection and prevention. (page 92)	The NIMH is continuing to investigate the basic neuroscience and clinical prevention and treatment issues related to eating disorders. In FY 1989 $7.3 million is estimated to have been spent on these problems. The Institute has published a pamphlet, "Useful Information on Anorexia Nervosa & Bulimia" which should be very helpful to professionals in assisting their clients.
Mental Health Research	
2. The Committee has often expressed its concern that mental health research funds have not adequately addressed the unmet needs of older Americans and encourages the NIMH to ensure that the proportion of funding designated for elderly research is commensurate with both the proportion of elderly in the population and the level of need. (page 93)	Research on the mental disorders of older Americans is a major NIMH priority. It includes a broad range of studies of late-onset depressive and psychotic disorders, with special attention focused on Alzheimer's disease (AD). Progress in these disorders will be enhanced by components of the "Decade of the Brain", Schizophrenia, and Severely Mentally Ill initiatives.
Clinical Training	
3. The Committee remains supportive of the State Human Resource Development Program and expects the NIMH to maintain funding for this program at 1989 levels...The Committee also considers training of the administrators and managers of mental health systems a high priority. (page 92 - 93)	NIMH will solicit applications for the State Human Resource Development Program not only to maintain the FY 1989 level, but to increase the funding by $100,000 in FY 1990. The priorities identified in the Committee's report will remain central to implementation of this program.

Significant Items in House and Senate Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 House Report No. 101-172	
Minority Fellowship Program	
4. ...The Committee encourages the NIMH to make an effort to help MFP participants receive support enabling them to complete their dissertation. (page 93)	NIMH is committed to the ultimate professional career of Minority Fellowship recipients. Planning for the completion of all academic requirements is integral to the program.
Community Support Demonstrations	
5. The Committee does not agree with the Administration's proposal to phase out the program. In addition, while the Committee recognizes the seriousness of the problem of the homeless mentally ill, funds have been added to the Administration request to ensure that projects are not limited solely to the homeless. (page 93)	NIMH notes the Committee's funding of the Community Support Program for FY 1990. Community-based programs of services for the mentally ill can form part of the support network which aids those at risk of homelessness as well as those who are without homes. The FY 1991 President's Budget contains $4 million targeted to prevention services which are not limited to homeless populations.
Prevention Services	
6. The Committee intends that a portion of the increase above the request be used to initiate the prevention services demonstration projects authorized in section 520A(b) of the Public Health Service Act. The Committee encourages the NIMH to give high priority to those projects that emphasize the actual provision of prevention services rather than the technical assistance, training or conferences. (page 93)	NIMH will issue a request for application (RFA) for services research demonstration projects focusing on prevention. The RFA will emphasize prevention of youth suicide and child and adolescent mental disorders. Research demonstrations (analogous to Clinical Trials of services interventions) are an integral part of the process of transferring the findings of basic and clinical research to those at risk for or already suffering from mental illness.

Significant Items in House and Senate
Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 House Report No. 101-172	
Medications Development	
7. The Committee intends that a portion of the funding provided above the Administration request be used to expand the Institute's drug development activities. (page 94)	NIDA increased the funding of the Medications Development Program by $6 million in FY 1990.
Clinical Research	
8. The Committee encourages the Institute to increase its clinical research efforts to focus on the structural components of treatment in order to evaluate those interventions which promote recovery, avoid relapse and are tailored to the specific characteristics of the patient. The Committee recommends that the Institute consider, if appropriate, entering into contracts with extramural researchers who have access to large patient populations in order to further this effort in a cost-effective manner. (page 95)	In FY 1989, NIAAA initiated a large scale, multi-site trial of patient-treatment matching that provides an opportunity for public and private treatment programs to work collaboratively with the experienced university-affiliated treatment outcome research experts in investigating promising patient-treatment matching strategies. Eight clinical research centers and a coordinating research center are participating in this cooperative agreement. Funds in the amount of $2,154,000 were provided from the ADMS Block Grant Set-aside.
Treatment Outcome Evaluations	
9. The Committee has provided funding for the first-year costs of the grants. The Committee is concerned that this could have set a precedent for asserting that other substance abuse funds provided by the Committee should be spread over a two-year period. (page 96)	The funds provided for Treatment Outcome Research grants are being used to fund one year of each grant.

Significant Items in House and Senate
Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 House Report No. 101-172	
Prevention Programs	
10. The Committee intends that the Office award new grants in 1990 for pregnant addicts and their infants within the funds provided. (page 95)	A total of $32.5 million is available for the Pregnant Women and Infants program in FY 1990. The Office for Substance Abuse Prevention anticipates that it will award about 100 new grants during FY 1990.
Alcohol, Drug Abuse and Mental Health Block Grant	
11. The committee intends that no more than five percent of this total be used for the statutory set-aside for services research, data collection and technical assistance. The Committee has not included bill language requested by the Administration...since the Committee has not reduced the block grant funding below the 1989 level. (page 90)	In FY 1990 ADAMHA used 5 percent of the total ADMS Block Grant for Services Research, Data Collection and Technical Assistance as required by the Anti-Drug Abuse Act of 1988. The use of the set-aside is described in the Office for Treatment Improvement Section of this document under "Grants to States." As noted by the Committee, grants were allocated according to the legislative formula.
Alcohol, Drug Abuse and Mental Health Block Grant	
12. The Committee wishes to reiterate that the funding provided in the Anti-Drug Abuse Act of 1988 for ADAMHA programs was intended to support activities for a one-year, not a two-year, period. The Administration should not take any action to preclude full obligation of these funds by States or other grantees in 1989. (page 97)	All monies available to ADAMHA under the Anti-Drug Abuse Act of 1988 were obligated in FY 1989. In addition technical assistance was provided to the States to enable them to begin using their ADMS Block Grant allocations as rapidly as possible. This effort is more fully described in the Office for Treatment Improvement Section of this document.

Significant Items in House and Senate Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 Senate Report No. 101-127	
Rural and Native American Mental Health Research	
1. With respect to the American Indian and Alaskan Native populations, the Committee is very concerned that mental health services and research is equally underdeveloped and underfunded relative to the degree of need. The Committee urges NIMH to coordinate its research on American Indians and Native Alaskans with the Indian Health Service. (page 173)	A report has been sent to the Congress on the rural mental health programs of NIMH, which include American Indians and Alaskan Natives. Currently, a Program Announcement is being developed to stimulate research proposals on the special mental health problems and needs of rural citizens. The Institute is and will continue to coordinate with the Indian Health Service.
Schizophrenia	
2. The Committee has been most impressed with the testimony presented by the National Alliance for the Mentally Ill and other organizations concerned with schizophrenia research. (page 174)	The National Plan for Schizophrenia Research forms a major portion of the agenda for NIMH's 1990s Decade of the Brain plans. The Institute intends to build on the nearly $86 million devoted to research relevant to schizophrenia in FY 1989 by expanding to approximately $100 million in FY 1990. Exciting new drug therapies, genetic discoveries, and neuroscience advances have already greatly furthered this field of research.

Significant Items in House and Senate Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 Senate Report No. 101-127	
Services Research	
3. The Committee continues to be concerned about the level of effort devoted to data collection, services research, and technical assistance. ...It has come to the Committee's attention that county governments are playing an increasingly critical role in the delivery of mental health services as States move to decentralize their service system away from State institutions toward community based systems of care. Data collection should reflect this shift and the National Reporting Program for Mental Health Statistics at NIMH should incorporate attention to the role of local governments in service delivery. (pages 174 - 175)	NIMH is nearing completion of a new National Plan for Research to Improve Care of the Severely Mentally Ill that has drawn in expert advisers from all parts of the country to consider and recommend ways in which mental health services research can contribute even more effectively to meeting the needs of this population in the future. Also, through its Public-Academic Liaison initiative, the Institute is substantially increasing the development of cooperative relationships that involve academic researchers and staff of State and local mental health agencies in joint studies of the financing, delivery, and effectiveness of public sector services.
Mental Health of the Elderly	
4. The Committee requests that NIMH place greater emphasis in the area of mental health of the elderly. ...The Committee expects that a portion of the funding provided above the administration's request will be allocated to this area. (pages 175 - 176)	Clinical and basic research in geriatric mental health, particularly studies on Alzheimer's disease, have shown progress in building a scientifically valid basis for services for this growing segment of the population. Separate reports (Consolidated Health and Moyer) to the Congress detail this progress in Aging and Alzheimer's disease. These conditions and their underlying brain pathology will receive intensive study during the "Decade of the Brain". There is a 13 percent, or $2.3 million increase in the funds provided to the Mental Disorders of the Aging Branch in FY 1990.

Significant Items in House and Senate Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 Senate Report No. 101-127	
Mental Health Personnel	
5. The Committee is concerned about the projected shortages of mental health personnel, particularly psychiatric nurses, psychologists, and psychiatric social workers, and the impact of these shortages on the delivery of quality mental health services. The Committee urges NIMH to support creative strategies to address this critical issue. (page 176)	NIMH is considering issues of the supply, distribution, and disciplinary affiliation of providers of mental health services in the context of closing out the Federal commitment to mental health clinical training. One recent innovation, the Faculty Scholars Program, is providing a major multiplier effect to clinical training resources. The Institute supports multidisciplinary clinical training programs.
Depression and Manic Depressive Illness	
6. The Committee applauds NIMH's efforts to disseminate information through its D/ART program, depression: awareness, recognition, and treatment. NIMH is encouraged to expand its efforts to educate primary health care professionals, particularly those in rural areas, about the diagnosis and treatability of depression so that a higher percentage of those affected can be treated. (page 176)	The D/ART Campaign continues to refine and optimize the dissemination of its professional training components. In FY 1989 a regional teleconference was presented throughout the Mid-west. Currently a collaboration with the American Medical Association is developing a pilot and prologue to a series of professional training videotapes. These media tools will be valuable in transferring the training materials to widely dispersed professional communities.

Significant Items in House and Senate Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 Senate Report No. 101-127	
Prevention	
7. The Committee is strongly supportive of prevention activities and expects NIMH to give a higher priority to its prevention research agenda. NIMH has not given sufficient attention to early intervention strategies. Expansion efforts should focus on psychological, environmental, and physiological focuses. Interdisciplinary efforts should be actively encouraged. (page 176 - 177)	During FY 1990 NIMH will sponsor a National Conference on Prevention Research. This meeting will assess the current state of the art in scientific research on prevention of mental disorders and their causes. Recent findings from prevention research will be disseminated and opportunities for new proposals will be identified. In addition, the Institute will sponsor a workshop, Conceptual Research Models for Preventing Mental Disorders, to promote research efforts to define linkages in risk factors and specific mental disorders as precursors to prevention studies.
Nursing Research	
8. The Committee continues to be disappointed with NIMH's record in supporting nursing research and training programs, and has expressed its concern about this orientation on numerous occasions. It is, therefore, requested that NIMH give greater consideration to nursing in its allocation of research training funds. (page 177)	The National Mental Health Advisory Council, Institute leadership, and program staff are jointly committed to incorporate the talents and professional expertise of psychiatric nurses into the research programs of the Institute. Collaborative efforts are being explored with the National Center for Nursing Research. In addition, a group of Council members and representatives of professional nursing groups are working with a newly recruited staff member to promote greatly increased participation by nurses in mental health research.

Significant Items in House and Senate Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 Senate Report No. 101-127	
Psychotherapy	
9. The Committee recognizes that, in addition to basic neuroscience research, there is a need to better evaluate the efficacy of verbal psychotherapy treatment. Therefore, the Committee would be supportive of NIMH funding a nonbiological clinical research center to evaluate the efficacy of most forms of verbal psychotherapy.	NIMH agrees with the importance of research into the effectiveness of psychotherapy. Over the past year, the Institute significantly increased activities in this area including an Institute-wide Psychotherapy and Rehabilitation Research Consortium to coordinate activities and planning for an annual state-of-the-art conference, and a psychotherapy research bulletin. Should an appropriate center proposal be submitted and receive excellent peer reviews, the Institute would be pleased to fund it.
Mental Health Research Training	
10. The Committee urges NIMH to continue to give high priority to the Minority Fellowship Program and the MARC Program. (page 177)	NIMH intends to continue its high priority efforts to increase the number of minority group students entering into research careers. The FY 1991 President's Budget provides for stable growth for Minority Fellowship and MARC programs.

Significant Items in House and Senate
Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 Senate Report No. 101-127	
Mental Health Clinical Training	
11. The Committee continues to support the NIMH Clinical Training Program, which serves a vital purpose both in training needed for mental health personnel in the now five core disciplines and in requiring them to pay back this support in an equal number of years of service to underserved areas and populations...This pay back provision is a critical component of the Clinical Training Program. The Committee is disappointed that its past directives regarding payback have been overlooked. This Committee wishes to state its clear intent that no funds under this program be awarded for which a payback obligation is not incurred. (pages 177 - 178)	NIMH notes the Congressional funding of the Clinical Training Program and will continue to work towards the goals referenced in report language. Payback requirements are applied to clinical trainees receiving more than 6 months of support. This permits funding short-term training, such as D/ART professional education, for currently practicing professionals. The Institute notes the language of the Conference Committee, elsewhere in this section, as it applies to continued funding of short-term training programs where a payback requirement would not be feasible.
Mental Health Clinical Training	
12. As NIMH allocates clinical training resources to meet the needs of high-priority populations, the Committee again directs that these funds be distributed on an equitable basis across the five core mental health professions, and encourages the Institute to fund interdisciplinary training programs. NIMH should also continue its prevention training initiative as directed by the Committee and the House-Senate conferees, as well as support for the health professionals training program in the identification and treatment of alcohol and drug abuse. (page 178)	NIMH actively seeks qualified, high-potential applicants for clinical training in all "core disciplines. In FY 1989 the Institute initiated efforts to fund marriage and family counselor training. Funding of training for other disciplines is well distributed including an approximately 6 percent share for multidisciplinary programs. The D/ART prevention training program will continue to train primary care physicians, conduct regional training, and develop curricula. The alcohol and drug abuse professional education activity has been shifted to the Office of Substance Abuse Prevention in accordance with the provisions of the Anti-Drug Abuse Act of 1988.

Significant Items in House and Senate
Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 Senate Report No. 101-127	
State Human Resource Development Program	
13. The Committee remains supportive of the State Human Resources Development Program, and directs NIMH to increase funding for this program over the fiscal year 1989 level. (page 178)	NIMH estimates increasing support for the State Human Resource Development Program by $100,000 in FY 1990. The total funding of $3.2 million will be awarded to States for projects incorporating the priorities highlighted by the Committee.
Mental Health Prevention Services Demonstrations	
14. The Committee is particularly concerned over reports of the increasing incidence of youth suicide. To date, no Federal funds have been allocated for suicide prevention demonstration projects. the Committee directs ADAMHA to provide $150,000 through the New Jersey Department of Human Services for a youth suicide prevention demonstration in New Jersey. The Committee intends for these funds to be used to broaden this program in Bergen County and to expand appropriate sections of the program to cover other areas in the State. The Committee hopes that the program may be used as a national model for other local governments that are attempting to combat the problem of youth suicide. (page 179)	NIMH is responding to the problem of youth suicide as identified by the Secretary's Task Force and the Committee. The Institute is taking particular care in this area where interventions could inadvertently increase rates of suicide. Institute staff will assist the New Jersey Department of Human Services in obtaining support for an expansion of a youth suicide program. The Institute is seeking to fund projects incorporating scientifically valid evaluation components so that findings can be extrapolated to other communities. Rigorous peer review of applications for merit is an essential part of the process of building the knowledge base needed to stimulate progress in addressing the youth suicide problem.

Significant Items in House and Senate Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 Senate Report No. 101-127	
HIV/AIDS	
15. The Committee directs expansion of the ADAMHA AIDS research portfolio in the area of social and behavioral sciences, consistent with the reports of the National Academy of Sciences, the President's Commission on AIDS, and the National Research Council. (pages 169 -170)	The cited reports have recognized drug abuse as an important factor in the spread of HIV/AIDS in the United States. Reflecting this importance, ADAMHA continues to fund a wide range of HIV/AIDS research with particular emphasis on the social and behavioral sciences. NIMH dedicates 43 percent of the HIV/AIDS research program to behavioral and social science research. NIDA spends over $2 million on mechanisms of behavior and behavioral change.
Prevention and Outreach Demonstrations	
16. ...NIDA is directed to enhance its role in designing, demonstrating, evaluating and implementing innovative methods to reduce high risk drug abuse activity. Similarly the Committee recommends that NIMH use its expertise and linkages with professional groups to provide leadership on AIDS and mental health, whether this means developing strategies for handling the chronically mentally ill or demonstrating treatment services for persons with HIV infection. The Committee is particularly interested in seeing the development of quality research data about the efficacy of different treatment modalities. (page 170-171)	NIDA shares the concern of the committee about the effectiveness of differing treatment modalities. In 1989, NIDA launched the Drug Abuse Treatment Outcome Study (DATOS) which will considerably improve the knowledge acquired from the previous two large scale studies (the Drug Abuse Reporting Program and the Treatment Outcome Prospective Study). NIMH is developing a program announcement for research on HIV/AIDS in chronically mentally ill individuals. In addition, extensive collaboration is ongoing with HRSA on the mental health aspects of counselling HIV testing clients. NIMH has been working closely with relevant professional societies on HIV/AIDS research and clinical training, and consults broadly with all types of professionals in developing its HIV/AIDS portfolio.

Significant Items in House and Senate Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 Senate Report No. 101-127	
Drug Abuse Research	
17. The Committee is distressed at the lack of evaluation data concerning effective treatment modalities, and urges NIDA to give highest priority to research on developing more effective drug abuse prevention and treatment programs. (page 180 -181)	NIDA shares the concern of the Committee regarding treatment efficacy data and is taking several approaches to increase our knowledge regarding what elements constitute efficacious treatment. They include most importantly collecting data on actual treatment practices and outcomes, and Medications Development for treatment of the abuse of heroin, cocaine and other drugs.
Drug Abuse Research	
18. The Committee is concerned that current surveys are not portraying accurately the extent of drug use in the Nation...the Committee urges NIDA to study the possibility of including children under the age of 12 in the triennial household survey, since it appears that drug abuse before the age of 12 is not unusual in many communities. The Committee feels strongly that research into the behavioral and psychological factors that may cause drug dependence must be increased in order to develop effective treatment and prevention techniques. (page - 181)	NIDA has considered the inclusion of younger children in the Household Survey, but has decided against it because 1) illicit drug use is rare among children under twelve and 2) the quality of data is poor since parents are usually present when interviews are conducted with younger children. Research into the etiology of drug abuse--behavioral and psychosocial, biological/genetic factors and psychiatric factors--is an important focus at both preclinical and clinical levels and continues to be a primary portion of NIDA's prevention program.

Significant Items in House and Senate Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 Senate Report No. 101-127	
Office for Substance Abuse Prevention	
19. The Committee believes that Partners in Alliance for Community Enrichment (PACE) would serve as an excellent demonstration and should be considered favorably for a community prevention grant. (page 184)	All applications received in response to the Community Prevention grant announcement will be reviewed for technical merit by an independent group of non-Federal professionals with expertise in the relevant fields. If approved by the Independent Review Group, a priority score will be assigned to the application. Funding decisions by OSAP are based, almost exclusively, upon these priority scores. The application by the Partners in Alliance for Community Enrichment, should it be submitted, will receive all due consideration for funding.
ADAMHA Services	
20. The Committee views with continuing displeasure efforts to alter the mission of ADAMHA to reduce the services components of ADAMHA's operations. The Committee believes that service activities, including administering the alcohol, drug abuse, and mental health services block grant and conducting services research and demonstrations, are essential to ADAMHA's fulfilling its congressionally approved joint mission of services coupled with research. The Committee notes that any attempt to reorganize or change the functioning of ADAMHA undertaken without the consultation and express consent of the Congress would be met with disapproval and specifically directs the Department to ensure that this does not occur during fiscal year 1990. (page 191)	At one time as part of our commitment to forming better linkages with the primary health care sector, consideration was given to moving the services components of ADAMHA to other agencies within the Public Health Service. After discussions of the advantages and disadvantages of such a reorganization, the Administrator of ADAMHA decided that such a change would not be undertaken at this time. As directed by the Congress (PL 100-690), the Assistant Secretary for Health has contracted with the Institute of Medicine to study the ..."appropriateness of the administering of health service programs in conjunction with the administration of biomedical and behavioral research...". The results of this study will not be available until May 1991 and will be considered in any future deliberations on modifying ADAMHA's mission.

Significant Items in House and Senate Appropriation Committee Reports-continued

Item:	Action Taken or to be Taken:
1990 Senate Report No. 101-127	
HIV/AIDS	
21. The Committee is greatly concerned that ADAMHA is neglecting its responsibility to lead the Federal efforts in the full range of AIDS research, prevention, and service delivery programs that fall under the agency's mission. ...The Committee believes that ADAMHA should be coordinating its prevention activities with CDC and its service delivery activities with HRSA, but must retain the lead in these activities consistent with its authorized mission. (page 169)	ADAMHA develops effective prevention and service delivery strategies and approaches based upon research, and consistent with its mission. These strategies are translated into clinical tools and implemented through delivery systems, community based organizations, etc. ADAMHA has been and will continue to work with CDC and HRSA to refine counseling strategies and to evaluate ongoing counseling efforts both within CDC's counseling and testing programs and within HRSA's AIDS Service.
Clinical Training Payback Function	
1. ...While the conferees encourage the National Institute of Mental Health to fund clinical training activities that include a payback requirement, the conferees do not intend that funding be limited only to activities with payback. The conferees intend, however, that the funds for clinical training be distributed on an equitable basis across the five core mental health professions. The conferees urge the Institute to give priority in awarding clinical training funds to trainees who provide service in public facilities and mental health underserved areas.	Payback requirements are applied to trainees receiving more than 6 months training. This provides flexibility to fund focused short-term training, such as D/ART professional education, to currently practicing professionals. NIMH consults with and monitors the clinical training needs of the core professions (psychiatric nursing, psychiatry, psychology, social work, and marriage and family therapy) to match programs to each discipline. The service delivery needs of underserved areas and priority-populations are key to the management of all aspects of this program.

Alcohol, Drug Abuse, and Mental Health
Authorizing Legislation

	1990 Amount Authorized	1990 Estimate	1991 Amount Authorized	1991 Estimate
1. General Mental Health:				
a. Research:				
General - Section 301 of the Public Health Service Act (PHSA)	Indefinite	$388,539,000	Indefinite	$412,491,000
Instrumentation Grants - PHSA Section 501	$5,000,000	1,000,000	$5,000,000	1,000,000
Research Training - PHSA Section 487	Indefinite	24,249,000	Indefinite	25,801,000
Research Management & Support - PHSA Section 301	Indefinite	40,118,000	Indefinite	42,626,000
b. Demonstrations:				
Community Support - PHSA Section 520A	60,000,000	28,303,000	Expired	---
PHSA Section 301	Indefinite	---	Indefinite	26,862,000
Homeless Demonstrations - P.L. 100-628, Section 621	11,500,000	6,038,000	Indefinite	6,006,000
c. Protection and Advocacy - P.L. 100-509	Indefinite	14,001,000	Indefinite	8,000,000
d. Clinical Training - PHSA Section 303	Indefinite	13,534,000	Indefinite	5,000,000
2. Drug Abuse:				
a. Research:				
General Research - PHSA Section 301 and 517	Indefinite	220,044,000	Indefinite	258,348,000
Instrumentation Grants - PHSA Section 501	5,000,000	550,000	5,000,000	504,000
Research Training - PHSA Section 487	Indefinite	3,926,000	Indefinite	4,950,000
Research Management & Support - PHSA Section 301	Indefinite	27,062,000	Indefinite	33,338,000
b. Demonstrations - PHSA Section 509G	Indefinite	128,152,000	Indefinite	109,934,000
3. Alcohol:				
a. Research:				
General Research - PHSA Sections 301 and 513(a)	Indefinite	131,106,000	Indefinite	137,138,000
Instrumentation Grants - PHSA Section 501	5,000,000	500,000	5,000,000	482,000
Research Training - PHSA Section 487	Indefinite	3,172,000	Indefinite	3,387,000
Research Management & Support - PHSA Section 301	Indefinite	11,114,000	Indefinite	12,217,000

Alcohol, Drug Abuse, and Mental Health
Authorizing Legislation - Continued

	1990 Amount Authorized	1990 Estimate	1991 Amount Authorized	1991 Estimate
3. Alcohol (continued):				
b. Demonstrations:				
PHSA Sections 301 and 513(b)....	Indefinite	$16,378,000	Indefinite	$9,498,000
4. Treatment Outcome Research:				
PHSA Section 301................	Indefinite	7,803,000	Indefinite	8,336,000
5. Substance Abuse Prevention:				
a. Demonstrations -				
PHSA Section 508................	Indefinite	135,810,000	Indefinite	199,593,000
P.L. 100-690, Section 3521......	$55,000,000	19,798,000	$60,000,000	20,660,000
b. Clinical Training -				
PHSA Section 508................	Indefinite	26,035,000	Indefinite	26,894,000
c. Program Management & Support -				
PHSA Section 508................	Indefinite	11,794,000	Indefinite	14,745,000
6. Treatment:				
a. Treatment Improvement Programs -				
PHSA Sections 301, 311, 509G, and 516........................	Indefinite	71,433,000	Indefinite	121,709,000
PHSA Section 509E...............	100,000,000 1/ (until expended)	64,345,000	---	---
b. Grants to States:				
ADMS Block Grant -				
PHSA Title XIX, Section 1911(a).	Indefinite	1,192,861,000	Indefinite	1,292,775,000
Homeless -				
PHSA Section 535................	35,000,000	27,813,000	Indefinite	33,703,000
7. Buildings and Facilities:				
PHSA Section 301................	Indefinite	196,000	Indefinite	3,126,000
8. Office of the Administrator:				
PHSA Section 301................	Indefinite	10,274,000	Indefinite	12,389,000
Total Appropriation.............		2,625,938,000		2,831,511,000 2/
Total appropriation against definite authorizations.............		108,750,000		22,646,000

1/ $75,000,000 was expended in FY 1989.

2/ Includes advance funding of $7,359,000 for Homeless programs.

Alcohol, Drug Abuse, and Mental Health Appropriations History

	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
1981	$1,164,696,000	$1,049,077,000	$1,049,077,000	$934,083,000
1982	344,026,000	839,726,000	781,367,000	761,007,000
1983	305,177,000	798,506,000	812,831,000	809,344,000
1984	357,826,000	799,202,000	835,581,000	848,015,000
1985	372,655,000	405,318,000 1/	930,232,000	925,121,000
1986	886,194,000	903,637,000	995,539,000	968,860,000
1986 Sequester	---	---	---	-41,661,000
1987	892,240,000	893,434,000 2/	1,099,113,000	1,062,365,000
1987 Supplmntl	231,000,000	331,700,000 3/	319,700,000 3/	312,700,000 3/
1987 Reappropr	(5,000,000)	---	---	---
1988	1,042,873,000	503,034,000 2/	1,469,313,000	1,373,727,000
1989	1,504,413,000	507,594,000 4/	1,583,191,000	1,562,712,000
1989 Supplmntl	---	---	---	283,000,000
1990	1,738,716,000	1,917,162,000	2,005,448,000	1,926,818,000 5/
1990 Sec 518 Red.	---	---	---	-1,135,000
1990 (DOT Appr)	300,000,000	---	---	727,000,000
1990 Sequester	---	---	---	-26,745,000
1991	2,831,511,000 6/			

1/ House did not consider the research training and block grant programs, as they lacked authorizing legislation.

2/ House did not consider the NIDA and NIAAA research programs, as they lacked authorizing legislation.

3/ Includes $50,700,000 for the Homeless Act.

4/ House did not consider the NIDA and NIAAA research, research training, and direct operations, demonstration programs, Protection and Advocacy, and Grants to States, as they lacked authorizing legislation.

5/ Excludes $7,359,000 in FY 1991 Advance Funding for Homeless.

6/ Includes $7,359,000 in FY 1991 Advance Funding for Homeless.

Justification

Alcohol, Drug Abuse, and Mental Health

	1990 Estimate	1991 Estimate	Increase or Decrease
Mental Health.........	$515,782,000	$527,786,000	+$12,004,000
FTEs..............	1,000	1,000	---
Drug Abuse............	379,734,000	407,074,000	+27,340,000
FTEs..............	397	467	+70
Alcoholism............	162,270,000	162,722,000	+452,000
FTEs..............	218	223	+5
Treatment Outcome Research.............	7,803,000	8,335,000	+532,000
Substance Abuse Prevention...........	193,437,000	261,892,000	+68,455,000
FTEs.............	102	135	+33
Treatment Improvement.	1,356,442,000	1,448,187,000	+91,745,000
FTEs.............	27	50	+23
Buildings and Facilities...........	196,000	3,126,000	+2,930,000
Office of the Administrator........	10,274,000	12,389,000	+2,115,000
FTEs.............	168	173	+5
Total Budget Authority............	$2,625,938,000	$2,831,511,000	+$205,573,000
FTEs..............	1,912	2,048	+136

General Statement:

I. Introduction

The Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) holds lead responsibility for the Federal Government's efforts to seek scientific solutions to the causes, treatment, and prevention of mental illness and alcohol and other drug abuse disorders, and for exerting national leadership, based on the information generated through research, to help improve the Nation's capacity to treat and prevent these disorders.

The ADAMHA is comprised of five principal components: at its core are three research institutes--the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the National Institute on Drug Abuse (NIDA), and the National Institute of Mental Health (NIMH)--whose primary mission is to advance scientific knowledge through the conduct (intramural) and support (extramural) of basic and clinical research and research training. Two additional ADAMHA components assist in the national leadership tasks of transferring and applying research-based knowledge to clinical treatment and prevention services: the Office for Substance Abuse Prevention (OSAP) conducts a wide range of prevention demonstration projects and education and training activities, while the Office for Treatment Improvement (OTI) is responsible for providing federal leadership in translating our knowledge base into improved treatment services; OTI also administers the ADMS Block Grant program and oversees State accountability to its requirements.

Today, growing acknowledgement exists of the need for scientific understanding of the causes of mental and addictive disorders, the mechanisms of effective treatments for them, and the rationale behind various approaches to large-scale, community-based prevention efforts targeted on these disorders. The urgency of this need is underscored by the virtual absence of proven means of treating the current scourge of cocaine addiction, one which is being perpetuated through an increasingly evident--and unprecedented--vulnerability of women of child-bearing age to addictive use of this drug. The importance of information that will lend itself to the elimination of current drug use and the prevention of future use gains added emphasis from the nexus between intravenous drug use and HIV/AIDS.

These highly visible and pressing problems, moreover, constitute only part of the justification for accelerated research on mental and addictive disorders. Accumulating evidence points to the heritability of these disorders, as well as to the indisputable likelihood of comorbidity, or co-occurrence, of mental and addictive disorders among a substantial number of Americans affected by them. Basic neuroscientific research offers the possibility--today within our reach--of explicating neurobiological and genetic causes that will enable medical scientists to address these problems at the most fundamental levels. Similarly, knowledge, which we now possess, that certain major psychiatric disorders in young adults more than double the likelihood that a young person subsequently will abuse drugs, provides an immediate basis for primary prevention programs targeted to this subgroup of potential drug users.

Awareness of the need for--and the achievability of--scientific solutions to urgent questions regarding the treatment and prevention of mental and addictive disorders is providing an unprecedented measure of stability and credibility to ADAMHA's research mission and to public perceptions of the legitimacy of our efforts to help expand and improve the Nation's treatment services for persons suffering from these disorders.

The recent shift in the nature of drug abuse--from that of a broad social problem to that of an increasingly widely recognized public health crisis which is measured in emergency room admissions, infant mortality, homicide rates, and societal ailments extending from homelessness to loss of individual potential and productivity--buttresses the case for an expanded research investment that is linked directly and visibly to treatment improvement. This shift challenges the Nation to recognize that the development of more effective treatments for addiction requires a substantial and sustained research effort and greater efficiency in translating knowledge generated through research into improved treatment services.

ADAMHA's emphasis on drug treatment improvement logically complements the Agency's research agenda and is a step toward our long-term goal of enhancing the quality of the Nation's treatment systems for persons suffering mental and addictive disorders. At present, treatments for these disorders are segregated from the general health mainstream. This separation reinforces the isolation and stigmatization of individuals suffering mental illness and addictive disorders. The availability of effective research-based treatments will foster improved linkages between the substance abuse and mental health fields and other areas of medicine and general health care.

Budget enhancements proposed for the Institutes, combined with an expanded Block Grant set-aside for services research, data collection, and technical assistance, will allow more service systems research and field research related to the application of treatment systems in the community. Funds also will allow ADAMHA to continue a major program of research demonstration projects, analogous to the large-scale clinical trials supported by the National Cancer Institute, that will increase treatment capacity while expanding knowledge.

In FY 1990, ADAMHA received funding through two separate appropriation bills. Primary funding was provided by the Labor-HHS Appropriation. An additional $727 million designated to expand and enhance substance abuse programs within ADAMHA was provided through the Department of Transportation Appropriation.

II. FY 1991 Highlights and Budget Policy

- Almost 50 percent, or $1.4 billion, of this budget proposal is related to continuation of the drug initiatives. The National Institute on Drug Abuse, the Office for Substance Abuse and Prevention, a portion of the new Office for Treatment Improvement, and a portion of the alcohol/drug homeless demonstration program are included in the drug budget. Approximately 108,000 treatment slots will be funded in FY 1991.

- Homeless funding devoted to programs within ADAMHA is $72 million, $2 million less than the FY 1990 level. The budget includes $7.4 million of advance funding appropriated in the FY 1990 appropriation bill for FY 1991.

- This request includes 62 new FTEs in FY 1991. In addition, ADAMHA will use 74 more FTEs in FY 1991 as it fully staffs the 162 FTE funded in the FY 1990 DOT Appropriation. Only 88 of those 162 FTEs were allocated to ADAMHA components in FY 1990. ADAMHA's FTE use will increase from 1,912 to 2,048, or 7.1 percent in FY 1991.

- The three Institute's research budgets combined is $941 million in FY 1991, an increase of $82 million or 9.5 percent over FY 1990.

- For the non-AIDS portion of the research budget of $777 million, the following principles apply:

  - The average cost for research project grants increase by approximately 6 percent over FY 1990 (+5.9 percent for NIMH, +6.1 percent for NIAAA, and +5.6 percent for NIDA).

  - The award rate will be 20 percent for the Agency (NIMH-16 percent, NIDA-28.5 percent, NIAAA-19.9 percent), down from 33 percent in the previous year, with a 90 percent payline of 130 (NIMH-120, NIDA-150, NIAAA-140), down from 150 in the previous year.

- The downward negotiations for research project grants will be approximately 8 percent overall (NIMH-10 percent, NIDA-2 percent, NIAAA-10 percent competing only).

- Each of the following mechanisms--alcohol and drug treatment outcome research, research centers, and research training budgets--is increased as follows for each institute (+4.9 percent for NIMH, +4.8 percent for NIAAA, and +8.9 percent for NIDA).

- Two new research centers will be funded in FY 1991, 1 in NIDA for prevention research with special emphasis on high risk youth and 1 in NIMH for molecular neurobiology.

- The number of research trainees will increase by 33 for a total of 1,321. There are no stipend or tuition increases provided in FY 1991.

- The other research mechanisms remain at the .Y 1990 level for NIMH and NIAAA. NIDA increases by $4.2 million for expansion of data collection activities and full funding of existing contracts.

- The Research management and support and intramural research budgets include sufficient funds for all built-in increases including funds for annualization of the 162 new FTEs needed to implement the recent drug bill and to continue support for HIV/AIDS activities.

o NIDA's FY 1990 budget reflects an adjustment of $3.7 million to research management and support from intramural research ($1.5 million) because of a reorganization in FY 1989 and from research contracts ($2.2 million) to reprogram funds to support the management of expanded programs in the drug abuse area. These FY 1990 adjustments do not affect the FY 1991 estimate.

o NIMH's protection and advocacy and clinical training programs are provided funding for the second year of a planned 3-year phaseover. Current plans call for the elimination of Federal funding after FY 1992.

o The NIMH community support program totals $27 million, a 5 percent decrease from FY 1990.

o NIDA research demonstrations decrease by $18 million or 14 percent below FY 1990 level of $128 million reflecting the completion of a portion of a major HIV/AIDS outreach demonstration program.

o NIAAA/NIDA homeless demonstrations decrease by $7 million following a major increase in FY 1990. The FY 1991 request includes advance funding of $.5 million.

o The Office for Substance Abuse and Prevention increases by 35 percent or $69 million to support an increase of: $52 million for the community prevention program, $6 million for high risk youth program, $5 million for pregnant women and their infants, and $6 million for other activities and program support.

- The Office for Treatment Improvement increases by 7 percent or $92 million to support an expansion of the ADMS and the Homeless block grant programs (+$105 million, including $6.9 million in advance funding), $2 million for treatment management and support, and a decrease of 16 million for the treatment improvement program which includes a reduction of $64 million for the waiting list reduction grant program offset by an increase of $48 million including $40 million for expansion of drug treatment and improvement of treatment effectiveness.

- The Buildings and Facilities budget totals $3.1 million for both the regular and the HIV/AIDS budget. This is a critical increase over the FY 1990 level of $196,000. Of this total, $1.6 million provides funds to improve 15 NIMH laboratory modules to the point where they would meet biomedical safety standards for handling HIV infected samples and viral concentrates. The regular funds provide essential maintenance and repairs for the Agency's Intramural facilities located on the NIH campus, the William A. White Building on the St. Elizabeths Campus, the Flow Laboratory Building in Rockville, Poolesville, and in Baltimore.

- Increases for the HIV/AIDS budget of $15 million, over the FY 1990 level of $215.0 million, support expansion of the following functional areas:

  - Biomedical Research (+$5.2 million)
  - Neuroscience and Neuropsychiatric Research (+$2.6 million)
  - Research Training (+$1.3 million)
  - Risk Assessment and Prevention (+$4.7 million)
  - Buildings and Facilities (+$1.6 million) (noted above)

PROGRAM ACCOMPLISHMENTS

The accomplishments that the agency has contributed toward increasing the knowledge about the cause, diagnosis, treatment, and prevention of ADM disorders have been prodigious. New knowledge and advances in research technology and theoretical concepts have opened new frontiers of research opportunities. The fields of neuroscience, epidemiology, and molecular genetics (to name a few) are yielding important knowledge crucial to developing an understanding of the nature and extent of the ADM disorders. Several of the more outstanding advances are identified below:

Mental Health

- **GENETIC MECHANISMS EXPLORED FOR KEY CHEMICAL SUSPECT IN SCHIZOPHRENIA**

  Two recent NIMH-funded studies provide new insight into the basic genetic control and regulation of dopamine, a chemical messenger in the brain that is excessively active in schizophrenia. In one study, researchers at Cornell University have isolated the genes for a group of enzymes that are involved in the synthesis of dopamine in nerve cells. They are now studying the regulation of these enzymes and their expression as gene products. In the other study, an NIMH-funded investigator has demonstrated how a specific gene is responsible for manufacturing one type of dopamine receptor (structures on the surface of nerve cells surface that permit dopamine to interact chemically with the cell). Approaches such as these are expected to aid in identifying the specific genetic abnormalities that contribute to schizophrenia. Such studies may suggest new treatment approaches and, possibly, new ways to prevent this devastating disorder.

- **DEPRESSION: AMONG THE MOST DISABLING OF HUMAN DISORDERS**

  Depressive disorders, which tend to be chronic, afflict nearly 10 million people in the U.S., but their broad impact on patients' lives has not been well documented. Thus, a major NIMH-supported study examined how depression affects patients' functioning and well-being, and compared its effects with those of eight chronic physical health problems: hypertension, diabetes, coronary artery disease, angina, arthritis, back problems, lung problems, or gastrointestinal disorder. In this large study of 11,242 outpatients, depressed patients functioned significantly worse at work, home, and at school than did patients in six of the other disease groups, and depressed patients spent significantly more days in bed than patients in four groups with other chronic conditions. This study underscores the fact that depression is a major public health problem that can seriously erode the quality of life and productivity of millions of Americans.

- **NEW INSIGHT INTO WAYS THE HIV/AIDS VIRUS ATTACKS THE BRAIN**

  Many HIV/AIDS patients develop a serious complication affecting the brain that produces severe, irreversible deterioration in mental function. NIMH intramural scientists, working with researchers from the

National Institute of Child Health and Human Development (NICHD), have found indications that the HIV virus may damage the brain without actually infecting it. Experimental evidence suggests that a free-floating protein (gp120) shed by the virus "binds" to nerve cell receptor sites that are normally used by an important chemical messenger: the peptide neurotransmitter VIP (vasoactive intestinal peptide). VIP plays a role in regulating immune system function and brain cell growth; thus, interference with its normal activity by the invading protein may in part account for both the immunological and cognitive symptoms of HIV/AIDS.

- **NEW CLUES TO THE ORIGINS AND DIAGNOSIS OF ALZHEIMER'S DISEASE**

A scientist at the University of Pittsburgh is conducting studies that may ultimately yield both a biological test for diagnosing a subtype of Alzheimer's disease and a fuller understanding of how genetic factors contribute to this memory-shattering illness. Following his initial discovery of a blood platelet abnormality (i.e., increased membrane fluidity) in some patients with the disease, he has found that the abnormality is associated with distinct clinical features, including an earlier onset of symptoms, a more rapidly progressive decline, and greater likelihood of a family history of dementia. This subtype of Alzheimer's disease appears to be inherited through an autosomal gene that is often expressed as clinical illness.

Most recently, this investigator has discovered that the genetic locus for the abnormality may be on the long arm of chromosome 21, where several other genes related to the biology of Alzheimer's disease have been localized previously. He now is attempting to pinpoint the specific chromosome 21 locus and to clarify how this subtype may be related genetically to other forms of Alzheimer's disease or to Down syndrome, which also is linked to chromosome 21.

- **FAMILY CARE OF ALZHEIMER'S PATIENTS: THE HEALTH RISKS OF CHRONIC STRESS**

The stress that often stems from caring for a relative with Alzheimer's disease may lead to long-term impairments in the caregiver's physical health as well as precipitate more transient psychological disturbances such as increased rates of depressive symptoms, anxiety, anger, and other stress-related symptoms. A researcher at Ohio State University has demonstrated a decline in immune function--and, thus, an increased susceptibility to physical illness--among people who had provided care to an Alzheimer's patient for a period of 4 to 6 years. When the patient died or moved to an institution, although the psychological status of former caregivers improved, immune function continued to decline, suggesting long-term physiological alterations in caregivers following years of chronic stress. These findings highlight the need to develop ways to lessen the psychological burdens on family members who assume the caregiver role.

- **NEURAL RECEPTORS FOUND FOR MARIJUANA'S ACTIVE INGREDIENT**

For the first time, the brain distribution of nerve cell receptors for THC, the active ingredient in marijuana, has been shown. The existence of these receptors, demonstrated by NIMH intramural scientists, suggests that there may be a natural chemical in the brain with action similar to THC. Further studies of how marijuana acts in the brain may lead to a new class of medications that has marijuana's medically useful characteristics without its adverse side effects.

- **BRAIN STRUCTURAL ABNORMALITIES IN SCHIZOPHRENIA**

Brain structural abnormalities appear to be an early event in the course of schizophrenia that may even precede the onset of the illness, intramural investigators have found. MRI (magnetic resonance imaging) scans of identical twins, only one of whom has schizophrenia, reveal subtle signs of reduced brain volume in the ill twin, such as slightly larger ventricles, cerebrospinal fluid-filled cavities. In this unique study, the normal twin serves as a genetically identical control, permitting investigators to infer that differences in the schizophrenic twin are likely to be caused by the illness, rather than by normal genetic variation in brain structure.

Drug Abuse:

- **ADVANCES IN COCAINE ABUSE RESEARCH**

In an effort to understand the basic mechanisms of drug abuse and addiction, scientists have developed a model of a "reward system" in the brain through which drugs of abuse act upon neurons in the ventral tegmental area (VTA) which contain the neurotransmitter dopamine. This model indicates that a variety of abused drugs share a common mechanism of action. Animal research to validate the model has shown that dopamine-blocking medications, as well as lesions to the VTA dopamine system, will prevent self-administration of cocaine; these findings provide a rationale for developing new medications that will act upon brain dopamine systems as possible treatments for cocaine addiction.

This year, the brain reward model has been expanded to explore specific aspects of cocaine addiction such as craving and relapse. Primary symptoms of cocaine abstinence include fatigue, depression, and craving; the relapse to cocaine use may be due to a drive to alleviate these withdrawal symptoms. Hypotheses that a decrease in brain dopaminergic activity is responsible for these symptoms is supported by findings which indicate that agents that mimic dopamine (e.g., bromocriptine and amantidine) reduce withdrawal symptoms by counteracting the dopamine depletion caused by chronic cocaine use.

The importance of dopamine in cocaine addiction was further emphasized by the findings of other studies that one class of dopamine-specific agents (D1 antagonists) is much more effective in reducing cocaine self-administration in animals than another class (D2 antagonists). These findings open promising approaches for the development of new medications to selectively reduce cocaine use.

* POTENTIAL PHARMACOTHERAPIES FOR CRACK COCAINE ADDICTION

Crack cocaine may be the most addictive substance yet known. Crack abuse is assuming epidemic proportions and, because of an uncontrollable craving for cocaine, abusers tend to strongly resist available treatments. Recent results of a NIDA-funded study indicate that the medication flupenthixol offers singular promise for the treatment of crack dependence. In this study, ten outpatients with histories of severe treatment-refractory crack addiction were administered depot injections of flupenthixol decanoate. The patients experienced a rapid, marked reduction in cocaine craving and use, as well as a lessening of cocaine withdrawal symptoms, while side effects of the medication itself were minimal. The possible value of this medication had been suggested from past research indicating an important role for the neurotransmitter dopamine in cocaine addiction. These encouraging findings are quite preliminary and must be replicated in a larger, double-blind, placebo-controlled study of depot flupenthixol which will be initiated soon.

Other promising medications now under development for cocaine addiction include buprenorphine. This agent has been suggested as a treatment for opiate addiction, given its capacity to block the pharmacologic effects of opiates while mimicking those effects in users, apparently without incurring dependence. Research with monkeys now has demonstrated that buprenorphine selectively inhibits an animal's drive to self-administer cocaine.

Fluoxetine, an antidepressant, and carbamazepine, an anticonvulsant, also have been shown to reduce rats' self-administration of cocaine. More extensive evaluations of these already-approved medications will be conducted in cocaine addicts.

* TREATING COCAINE TOXICITY

Lethal cocaine overdoses are seen with increasing frequency. NIDA intramural investigators recently have identified chemical sites in the brain where cocaine acts to produce seizures and death; that is, while cocaine binds to the brain at numerous anatomical sites, the primary mechanism by which it causes seizures is by increasing the effects of the neurotransmitter, serotonin. Cocaine causes death by disrupting the balance and function of multiple brain neurotransmitters. Identification of the neurotransmitter systems involved has permitted the investigators to identify drugs that will help to stabilize these systems in the event of an overdose and, thus, reduce the damaging and lethal effects of cocaine abuse.

* GENETIC VULNERABILITY

Genetic vulnerability is proving to be an important factor in the physiologic sensitivity to drugs of abuse. NIDA investigators have shown that when rats that have a genetic form of high blood pressure (and which are thought to be a model of human hypertension) are stressed, they have an exaggerated toxic response to cocaine not seen in normal animals. This has important clinical implications because some people may be hypertensive before starting cocaine; in particular, blacks are at substantial risk.

- **SENSATION-SEEKING AND HIGH RISK YOUTH**

Prevention research indicates that adolescents who are rated as "high sensation seekers" tend to be 2 to 7 times more likely to begin use of alcohol, marijuana, cocaine, and other drugs than are "low sensation seekers." Now, preliminary research with animals has shown that novelty- seeking behavior involves the dopamine system in the brain, a neurotransmitter that mediates the reinforcing properties of drugs. Thus, the concept of "sensation seeking" promises to be useful in identifying youth at heightened risk for drug use. Current research is assessing the efficacy of anti-drug use messages tailored for sensation-seeking adolescents.

- **FAMILY THERAPY IN TREATING ADOLESCENT DRUG ABUSERS**

Three studies examining adolescent drug abuse treatment have shown significant differences in the results of family therapy, as opposed to individual counseling and drug abuse education programs that involve the family of the young patient. Family therapy approaches to drug abuse treatment are based on the premise that an understanding of why an adolescent is involved in undesirable behaviors can be enhanced through examination of the young person's family system. Indeed, research has shown that dysfunctional behavior in an individual often is associated with a dysfunctional family system. In the NIDA-sponsored studies, positive outcomes as a result of family therapy have been maintained over a period of five years.

- **DRUG ABUSE TREATMENT FOR HIV POSITIVE PERSONS**

Preliminary results from several prevention/intervention studies have indicated that social learning approaches aimed at reducing risk-taking behaviors are more effective in changing drug use practices (e.g., needle sharing) than in sexual practices. Findings that drug use practices can be addressed through various interventions has spurred research on the optimal organization of drug abuse treatment for seropositive individuals.

Initial efforts concentrated on methadone maintenance, with experimental programs providing HIV/AIDS education and information as well as medical and psychiatric assessments and care. Experience has shown that because of a high rate of relapse after methadone withdrawal among seropositive individuals, detoxification is seldom worth the risk to the patient or the public, so methadone maintenance treatment may be needed on a long-term basis.

Retaining IV drug abusers in methadone maintenance treatment programs has been shown to spare drug abusers from HIV infection. New York City investigators measured antibodies to HIV and hepatitis B virus markers in 58 socially rehabilitated former heroin addicts who had been maintained on methadone for an average of 16 years. None had antibody to HIV, although 92 percent had evidence of current or previous hepatitis B infection.

* KAPOSI'S SARCOMA CO-FACTORS IN DRUG USERS

Although HIV infection is associated with Kaposi's sarcoma (KS), HIV alone does not seem to cause KS in AIDS patients. KS occurs with greatly increased incidence in homosexual men (especially white homosexual men) with AIDS, but is relatively rare in others, and the proportion of AIDS cases with KS in the U.S. and Europe has been declining each year. Furthermore, KS is rare in transfusion-acquired AIDS cases linked to donors in whom KS subsequently developed, suggesting that a specific strain of HIV is not responsible.

Nitrite inhalant abuse and/or another "unidentified" sexually transmitted disease have been proposed to be KS cofactor(s). Clarifying the mechanisms by which HIV infection and the KS cofactor produce AIDS-related KS may provide insight into the pathogenesis of AIDS and may provide a prevention strategy for the most common cancer diagnosed among AIDS patients.

* HIV INFECTION RATE STABILIZING IN PRISONS

In 1988, eight percent of imprisoned intravenous drug abusers were seropositive for HIV 1 (AIDS virus) and one percent were positive for HTLV-1/2 (related leukemia viruses), NIDA investigators have found. Although these data are elevated compared with estimates from the general population, comparison with data from prior years suggests a stabilization of the prevalence of antibody in the prison population being measured.

* MEDICATION DEVELOPED FOR HEROIN ADDICTION USED FOR SUDDEN INFANT DEATH SYNDROME

Heroin and other opiate drugs depress breathing--the cause of most heroin overdose deaths. A medication developed for the treatment of heroin addiction, naltrexone, is able to block this opiate-induced respiratory depression. Recently, NIDA-supported investigators have shown that naltrexone can also be used to treat infants prone to Sudden Infant Death Syndrome (SIDS), a condition attributed to respiratory failure. Initial studies established that levels of endorphins (the "natural opiates") were elevated in babies who had recently experienced a near miss for SIDS, or who had Retts syndrome, a symptom of which is apnea (cessation of breathing). Of 19 children treated with naltrexone, none experienced an interruption of breathing while receiving the medication. Naltrexone does not decrease the elevated levels of endorphins in these children, but it does appear to protect against the possibility of the excess endorphin depressing respiration and killing the child.

* **FEMALE IV DRUG USERS RESPONSIVE TO TREATMENT/PREVENTION**

The proportion of women intravenous drug abusers in drug treatment programs, as emergency admissions, and with AIDS, declines by age in San Francisco, Chicago, and the Bronx. Apparently women get into treatment and out of drug use at an earlier age than men. This is important information for targeting intervention efforts.

Alcoholism:

* **EFFECTS OF LOW CONCENTRATIONS OF ALCOHOL ON A MAJOR BRAIN NEUROTRANSMITTER SYSTEM**

The excitatory amino acid system, a major brain neurotransmitter system which is known to be important in processes of learning, memory, and neuronal development, is also involved in neurotoxic--or excitotoxic--brain damage. One class of receptor for these neurotransmitters, known as the NMDA receptor, is also involved in the effects of the highly addictive drug, PCP. NIAAA intramural researchers have now found that the NMDA receptor system is exquisitely sensitive to alcohol; ethanol levels produced in the body by the consumption of very small quantities of alcohol inhibit the normal function of this receptor. This sensitivity of the NMDA receptor system to alcohol could be the basis for acute and chronic effects of alcohol abuse, such as blackouts and alcohol withdrawal seizures. Also, the vulnerability of the NMDA system to PCP raises the possibility that it might also be associated with certain addictive properties of alcohol. The new information about the NMDA receptor system provides the foundation for extensive, future analysis of systems responsible for the reinforcing properties associated with alcohol craving. An understanding of the principles of alcohol and drug-induced reinforcement of behavior is key to intervening in the "demand side" of alcoholism and drug abuse.

In addition, treatment with an NMDA receptor blocker has been shown to reduce alcohol withdrawal seizures. Further research on the actions of alcohol on NMDA receptors may lead to the development of better therapeutic drugs to treat alcohol withdrawal.

* **DETECTION AND CHARACTERIZATION OF BRAIN DAMAGE IN ALCOHOLICS**

Chronic alcoholism has long been implicated in brain damage, but the nature and progression of such damage with the course of the disorder has not been understood. Brain imaging, using computerized tomography (CT) now makes it possible to characterize physical changes in brains of active alcoholics. A recent NIAAA-supported study examined a group of male alcoholics and a group of age-matched control nonalcoholic males. CT brain scans and cognitive performances were measured and lifetime alcohol consumptions and body sizes were assessed. Results indicated that the alcoholic subjects had substantial brain damage for their age, and that the degree of damage correlated significantly with lifetime alcohol consumption. One brain cortical region was enlarged only in older alcoholics and was increasingly enlarged with age. Another cortical region was enlarged in alcoholics of all ages--including young alcoholics--which may indicate that the cortex is most susceptible to neurotoxic effects of alcohol. The findings suggest that imaging technologies may be useful in the early diagnosis of alcoholism, and may lend themselves to the development of new treatment approaches for alcoholism.

* GENETIC DIFFERENCES IN SELECTIVELY BRED ANIMAL MODELS INDICATE DIFFERENCES IN SENSITIVITY TO ETHANOL

Scientists are striving to determine the neurochemical effects of ethanol in order to ultimately understand the causes alcoholism. Some of ethanol's acute effects are thought to be mediated via newly discovered neuropeptide systems such as neurotensinergic systems. Recent studies characterizing neurotensin (NT) receptors in two strains of mice, selectively bred for differences in sensitivity to ethanol, have indicated that the numbers of NT receptors in several discrete brain regions are significantly higher in the strain of mice that are less sensitive to ethanol. Previous pharmacological studies have indicated that NT administered centrally elicits a number of physiological and behavioral responses including hypothermia, analgesia, muscle relaxation, decreased locomotor activity, and enhanced sensitivity to soporific effects of ethanol. Thus, the genotype specific pharmacological interaction of NT with ethanol may be due to genetically selected differences in NT receptors in these strains of mice. Further investigation of neuropeptide involvement in alcohol intoxication in selectively bred animal models may explain the genetic factors that trigger differences in sensitivity to ethanol.

* FINDINGS SHOW PROMISE IN DEVELOPMENT OF AN INDICATOR OF ALCOHOL USE

The effects of alcohol on membranes are well known. One of the more promising areas of research in this area concerns the manner in which information is transmitted from one neuron to another. Alcohol has been shown to modify the process that translates the signal initiated by the action of neurotransmitter on its receptor and the subsequent biological response in the neuron. With the use of second messengers, neurons can process numerous signals from many different types of input. One important second messenger is adenosine-3', 5'-cyclic monophosphate (cAMP). Acute alcohol exposure enhances receptor-stimulated production of cAMP in neuronal cell cultures. However, chronic alcohol exposure results in the opposite response. An important advance has been the finding that this reduced stimulation of cAMP production after alcohol treatment can be observed in cultured lymphocytes from alcoholics, as well as in neurons. This finding promises to set the stage for the development of an important indicator of alcohol use.

- **COOPERATIVE AGREEMENTS**

  NIAAA has initiated two major collaborative studies. Scientists participating in the Genetics Cooperative Agreements will study the gene or genes that affect susceptibility to alcoholism using recent developed recombinant DNA, mathematical analysis and computer technologies. Their goal is to identify the genetic component of alcoholism at the chromosome level. The Patient-Treatment Matching Cooperative Agreement is a multi-site project to further investigate research findings demonstrating that matching alcoholic patients to suitable interventions enhances treatment effectiveness.

Substance Abuse Prevention:

- **DEMONSTRATION PROGRAMS EXPANDED**

  In accordance with provisions of the Anti-Drug Abuse Act of 1988, OSAP last year announced funding for projects designed to demonstrate innovative approaches to preventing substance abuse and its consequences among pregnant and postpartum women and their infants. OSAP also required that recipients of High Risk Youth Demonstration Grants strengthen the evaluation components of projects. Early in the year, OSAP sponsored nine regional technical assistance workshops which were attended by more than 2,000 prospective applicants for these grant funds. More than 500 applications were submitted, and OSAP funded 21 projects targeting pregnant and postpartum women and their infants, and 30 high risk youth grants.

  In keeping with the emphasis on rigorous evaluation of new prevention strategies, OSAP awarded a contract to evaluate 57 of its demonstration grant programs. The contractor will conduct the evaluations on the basis of first-hand, intensive observation of each of the projects.

- **FEDERAL AD HOC INTERDEPARTMENTAL TASK FORCE**

  In 1989, an OSAP-chaired task force involving the Departments of Justice, HUD, Labor, and Transportation began working with four communities to ensure that separate streams of federal funding are used with optimal effectiveness in conducting community-based substance abuse prevention demonstration projects. Members of the task force have sought to identify innovative ways in which communities can integrate funding from disparate federal sources in order to accomplish the goals of a given community. Participating communities are San Francisco, California; Orange County, California; Trenton, New Jersey, and; Wilmington, Delaware.

- **COMMUNITY PARTNERSHIP GRANT**

  OSAP has completed preparations for a new Community Partnership Grant program, under which 150 to 200 grants will be awarded in 1990. The Community Partnership Grants are intended to foster the creation of coalitions of public and private organizations, agencies and institutions, within local communities which will work together in developing long-range, comprehensive, multi-disciplinary community-wide alcohol and other drug abuse prevention programs.

I. Mental Health

Budget Authority by Mechanism

	1989 Actual		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount
Research Project Grants:						
Continuations...........	655	$119,412,000	745	$144,160,000	867	$180,057,000
Admin. Supplements......	(13)	470,000	(6)	1,267,000	(6)	1,335,000
New/Competing Combined..	390	71,609,000	404	76,273,000	278	54,513,000
Subtotal, RPG.........	1,045	191,491,000	1,149	221,700,000	1,145	235,905,000
Research Centers..........	37	38,973,000	44	53,721,000	45	55,430,000
Other Research:						
Research Career Programs.	209	13,249,000	232	19,297,000	224	19,377,000
Cooperative Agreements...	30	5,874,000	20	6,797,000	24	9,667,000
Instrumentation Grants...	35	993,000	35	1,000,000	34	1,000,000
Small Grants.............	64	2,143,000	30	2,178,000	33	2,482,000
Subt., Other Research...	338	22,259,000	317	29,272,000	315	32,526,000
Total, Research Grants	1,420	252,723,000	1,510	304,693,000	1,505	323,861,000
Research Training:	FTTP		FTTP		FTTP	
Individual Awards........	133	2,311,000	199	3,535,000	210	3,877,000
Institutional Awards.....	944	19,979,000	976	20,714,000	996	21,924,000
Total, Res Training...	1,077	22,290,000	1,175	24,249,000	1,206	25,801,000
	No.		No.		No.	
Res. and Dev. Contracts...	29	7,182,000	31	7,742,000	26	7,762,000
Subtotal, Extram. Res...		282,195,000		336,684,000		357,424,000
	FTE		FTE		FTE	
Intramural Research.......	589	72,269,000	597	77,104,000	597	81,868,000
Res. Mgmt. & Support......	386	39,229,000	403	40,118,000	403	42,626,000
Total, Research.........	975	393,693,000	1,000	453,906,000	1,000	481,918,000
Demonstrations:	No.		No.		No.	
Mental Health (CSP).....	178	25,920,000	174	28,303,000	157	26,862,000
Mental Health (Homeless)	11	4,594,000	26	6,038,000	26	6,006,000
Subtotal, Demos.......	189	30,514,000	200	34,341,000	183	32,868,000
Protection & Advocacy.....	56	12,844,000	56	14,001,000	56	8,000,000
Clinical Training.........	135	12,844,000	158	13,534,000	65	5,000,000
Total, NIMH........		449,895,000		515,782,000		527,786,000
(HIV/AIDS non-add)		(48,373,000)		(68,354,000)		(78,136,000)
FTE............		975		1,000		1,000
(HIV/AIDS FTE)		(27)		(46)		(46)

OVERVIEW

The National Institute of Mental Health (NIMH) is the largest scientific institute in the world with a primary focus on mental disorders. In addition to roughly 600 researchers in its intramural research programs, NIMH provides, through its extramural programs, the majority of the financial support for other U.S. research efforts focused on mental illness. The Institute provides national leadership for mental health efforts. Its mission includes both basic and clinical research on mental disorders, research training, mental health services research, education and knowledge dissemination, and research demonstration programs for the prevention and treatment of mental illness and for the rehabilitation of the mentally ill.

NIMH-supported research has already done much to reduce the enormous disability--and attendant social and personal costs--of mental illness. Equally important for the 20 percent of Americans who will suffer a mental disorder during their lifetimes, there has been an explosion over the past decade in the scientific knowledge that underpins the study of mental illness, creating realistic new hope that still-intractable mental disorders will be conquered in the foreseeable future.

On July 25, 1989, President Bush signed into law the congressional resolution declaring January 1990 as the beginning of the **"Decade of the Brain."** This presidential proclamation recognizes the enormous potential of the brain sciences to advance understanding of some of the most serious disorders threatening the physical and mental health of the Nation. In keeping with the spirit of that declaration, NIMH has developed a series of neuroscience initiatives to provide greater impetus to research related to schizophrenia, Alzheimer's disease, manic-depressive illness, and other serious mental disorders.

FRAMING THE RESEARCH AGENDA - MAJOR NIMH PLANS AND PRIORITIES

To better focus research efforts and to capitalize on recent discoveries in the basic and clinical sciences of mental disorders, NIMH, with its National Advisory Mental Health Council, has been developing four major research plans or agendas. Two of these initiatives are now underway as a combined plan, a third is about to be launched, and a fourth is still under development. Those plans are described below, as are NIMH's other major priorities.

National Plan for Research on Schizophrenia and the Brain

In 1988, NIMH and its National Advisory Mental Health Council issued two reports that provide blueprints for the research needed to conquer severe mental illness in our Nation. One, A National Plan for Schizophrenia Research, outlines an effort to identify the causes of schizophrenia and develop effective treatments. The second, Approaching the 21st Century: Opportunities for NIMH Neuroscience Research (also known as the "Decade of the Brain" report), recommends initiatives to sustain and accelerate the extraordinary pace of research advances in the basic and clinical neurosciences of mental illness.

Because substantial elements of the two initiatives are overlapping and complementary, their implementation has been combined into a single plan, The

National Plan for Research on Schizophrenia and the Brain. This plan spans all aspects of the Institute's intramural and extramural research activities. Examples of steps to bring this combined plan to fruition are presented here; others can be found throughout this section.

- Centers for Neuroscience and Schizophrenia: Four new research centers are focusing intensively on the neuroscience of schizophrenia. Basic and clinical approaches are integrated at these centers, to improve the understanding, diagnosis and treatment of schizophrenia.
- Molecular Genetics Initiative: Spurred by recent advances in molecular genetics technology and by the very encouraging suggestions of genetic linkages to such specific mental disorders as schizophrenia, depression, and Alzheimer's disease, this initiative includes 10 Diagnostic Centers for Psychiatric Linkages Studies. Here, NIMH is coordinating efforts to establish a national "bank" of cell lines from families with a high prevalence of these disorders for study of their genetic bases.
- Brain Resource Acquisition and Information Network (BRAIN): The goal of this program, which will be initiated in FY 1990, is to increase the availability of brain tissue to neuroscientists studying the brain/behavior relationships in schizophrenia and other related disorders.
- Centers for Excellence in Molecular Neurobiology: These research centers are planned to study the chemical building blocks that control the structure and function of nerve cells in health and disease. The first center will be initiated in FY 1991.
- Computer Applications in Neuroscience: To encourage the application of new quantitative tools and techniques to the mental health field, in FY 1989 NIMH initiated a grant program to support research that integrates mathematical and neuroscience approaches.
- National Neural Circuitry Database: To help scientists and clinicians analyze and understand rapidly accumulating data about the brain's structure and function, NIMH is exploring the possibility of building a comprehensive database incorporating mathematical and graphic displays of research information about the brain. The Institute of Medicine of the National Academy of Sciences is currently conducting a feasibility study and will issue its final report in FY 1991.
- Natural Products Screening Program: To aid in discovering new treatments for mental disorders such as schizophrenia and HIV/AIDS-related dementias, NIMH has issued a contract to screen natural products that may have therapeutic potential as psychoactive agents. This effort will be integrated with ADAMHA's medications development program, for which the National Institute on Drug Abuse serves as lead Institute.

Both the NIMH Public-Academic Liaison (PAL) program and the National Program of Research to Improve the Care of the Severely Mentally Ill, described later in this section, are also outgrowths of the National Plan for Research on Schizophrenia and the Brain.

National Plan for Research on Child and Adolescent Mental Disorders

At least 7.5 million American children and adolescents (more than 12 percent of our youth) now suffer from some mental disorder or developmental impairment. Yet too many young people with severe and long-lasting mental disorders cannot now be significantly helped because their illnesses are not adequately understood.

In response to requests from the House and Senate Appropriations Committees, the National Advisory Mental Health Council (NAMHC) has developed and submitted The National Plan for Research on Child and Adolescent Mental Disorders. This plan builds upon a study stimulated by NIMH and released in June 1989 by the Institute of Medicine of the National Academy of Sciences. In its report, the NAMHC outlines a strategy for mounting a systematic assault on the mental disorders that afflict the Nation's youth.

The National Plan recommends major new initiatives spanning a 5-year period, beginning in FY 1991, to increase understanding of the basic causes of child and adolescent mental disorders; determine the effectiveness of biological, psychosocial, and other treatments; provide a research base for more effective service delivery; and enlarge the cadre of qualified, committed researchers studying child and adolescent mental disorders.

The Council's major recommendations for NIMH include the following:

- Establish new multidisciplinary research centers focusing on clinical and basic research aspects of child and adolescent mental disorders;
- Increase the number of individual research grants awarded to qualified investigators conducting basic, clinical, and service system research.
- Support the career development and training of additional child and adolescent mental health researchers;
- Strengthen NIMH leadership in stimulating dissemination of key research findings on child and adolescent mental disorders to lay and professional audiences.

National Program of Research to Improve the Care of the Severely Mentally Ill

As emphasized in the National Plan for Schizophrenia Research, the existing mental health service delivery system is too fragmented to provide accessible, coordinated, long-term care for severely mentally ill individuals. Furthermore, because the financial burden for these conditions is often substantial, new and improved reimbursement mechanisms are needed to support coordinated services.

Responding to these problems, NIMH is nearing completion of a new National Program of Research to Improve the Care of the Severely Mentally Ill. The planning process, begun in the spring of 1989, has drawn in expert advisers from all parts of the country to consider and recommend ways in which mental health services research can contribute to meeting the needs of this population. The report will be completed in early 1990.

Public-Academic Liaison (PAL) Program

The NIMH Public-Academic Liaison (PAL) program provides strong encouragement and support for academic researchers to form collaborative working relationships with public mental health service settings, particularly in projects that focus on care of the severely mentally ill population. These studies are expected to increase and improve the usefulness of services and clinical research in such areas as the homeless, child and adolescent services, and HIV/AIDS in the severely mentally ill.

Alzheimer's Disease and Related Dementias of the Elderly

Alzheimer's disease has devastating effects on the mental and physical well-being of as many as 3 million older Americans. The total cost of severe Alzheimer's and related dementias has been estimated to be between $24 billion and $48 billion per year. In keeping with the NIMH "Decade of the Brain" initiative, intensive research is being devoted to the basic brain pathology underlying Alzheimer's disease--particularly links between memory-related impairments characteristic of this disorder and deficits found in the brain systems using the chemical messenger acetylcholine. In addition, the genetic basis of this disorder is receiving intensive study, as is the search for definitive and clinically useful diagnostic markers of this disorder. The Institute is exploring the use of biological and behavioral techniques to improve memory and is developing family care and service delivery models to reduce the adverse mental and physical health effects of caregiving for family members who care for an Alzheimer's disease patient.

Suicide Across the Lifespan

Suicide, the eighth leading cause of death in the United States, is the second leading cause of death among people ages 15 to 24. Research has shown that mental illnesses, particularly disorders such as depression and panic disorder, are among the most prevalent risk factors for suicide. In recognition of continued public and Congressional concern about suicide throughout the life cycle, the Institute has embarked on a long-term approach to enhancing understanding and prevention of suicide by issuing a program announcement encouraging research on suicide and suicidal behavior across all age groups. Key areas of study include epidemiology, developmental psychopathology, biological risk factors, clinical course, treatment, and prevention of suicide and suicidal behavior.

A multidisciplinary research center devoted to studying youth depression, anxiety, and suicide has also been established. In addition, public and professional education efforts to improve the recognition, diagnosis, and treatment of depressive disorders, such as the NIMH Depression Awareness, Recognition, and Treatment (D/ART) program, may contribute to a reduction in the incidence of suicide.

The Homeless Mentally Ill

Homelessness and its relationship to mental illness are major priorities of the Administration and the Institute. During FY 1989, an Office of Programs for the Homeless Mentally Ill was established in the Office of the NIMH Director to oversee a major initiative in this area. A special request for applications was issued covering a wide variety of research and research demonstration approaches. Projects supported include studies of the incidence, prevalence and course of mental illness among the homeless population, as well as studies of the most appropriate and effective treatment and service delivery approaches.

Rural Mental Health

Rural mental health is another priority research concern for NIMH. The Institute supports investigator-initiated research, research training, clinical training, State human resource developmental programs, and mental health services demonstration programs germane to rural mental health. The thrust of these efforts is to improve scientific understanding of factors affecting the mental health of rural Americans and to provide a solid empirical base for providing appropriate mental health services to people of all ages living in rural environments.

Recent survey research has indicated that farm families rank stress next to chemical exposure as their most significant health concern, and that some 21 percent of rural residents report significant levels of depressive symptomatology. To aid in meeting the treatment needs of this population, the NIMH Depression Awareness, Recognition, and Treatment (D/ART) program is providing professional training programs about the diagnosis and treatment of depression in many States with substantial rural populations, including Indiana, Minnesota, Illinois, Utah, Vermont, Michigan, and Iowa. The training will increase the participants' ability to diagnose and treat depression appropriately.

HIV/AIDS Research

NIMH supports a broad range of research on and related to Acquired Immunodeficiency Syndrome (AIDS), and has funded the first training programs for AIDS researchers. The NIMH program involves basic research in neuroscience and behavior, as well as clinical, services and prevention research. NIMH HIV/AIDS research focuses on (1) brain effects of HIV infection; (2) behavior change and prevention; (3) psychoneuroimmunology; (4) clinical research on HIV-related mental disorders; and (5) research on the structure, process and financing of mental health services for the mentally ill with HIV infection.

A. Research

Authorizing Legislation - Sections 301, 487, and 501 of the Public Health Service Act.

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$453,906,000	$481,918,000	+$28,012,000

1991 Authorization...................... Indefinite

Purpose and Method of Operation

In carrying out its research responsibilities, the Institute:

1. Conducts and supports, as its primary effort, research and research training on the biological, psychological, epidemiological, and social science aspects of mental health and illness;

2. Conducts and supports research on the development and improvement of mental health services and prevention programs and on their administration and financing;

3. Collaborates with, and provides technical assistance and data to, State and sub-State authorities to assist them in planning, establishing, maintaining, coordinating, and evaluating more effective mental health programs;

4. Collaborates with, provides assistance to, and encourages other Federal agencies and national, foreign, State, and local organizations and institutions to facilitate and extend programs to promote mental health and prevent mental illness and to provide for the care, treatment, and rehabilitation of the mentally ill;

5. Collects, analyzes, and disseminates scientific findings and data on the incidence, prevalence and resources for the treatment of mental illness; and

6. Carries out administrative and financial management, policy development, planning and evaluation, and public information functions which are required to implement such programs.

Funding levels for the past five fiscal years were as follows:

1986	$255,207,000
1987	$302,726,000
1988	$336,414,000
1989	$393,693,000
1990	$453,906,000

Rationale for the Budget Request

The FY 1991 budget request includes $481.9 million for the full range of NIMH research activities. In total this represents a 6 percent increase over the FY 1990 funding for extramural and intramural research, research training, and research management and support.

In FY 1991, investigator-initiated research project grants retain preeminence in the NIMH program with 1,145 grants. NIMH management decisions have preserved the FY 1991 program level at approximately the same level as FY 1990--1,149 grants. The FY 1991 request includes 278 competing awards, as compared to 404 competing grants in FY 1990. Funding for this mechanism totals $235.9 million in FY 1991, a 6 percent increase over the FY 1990 level. The budget request will provide funding for approximately 16 percent of the grants approved by the scientific peer review and National Advisory Council review process. The award rates for FY 1989 and FY 1990 were 31 percent and 26 percent, respectively. In keeping with the Administration's priority for HIV/AIDS activities, all individual HIV/AIDS grants will be funded at approximately 5 percent less than the budget levels recommended by the review process, while all individual non-AIDS grants will be funded at roughly 10 percent less than the recommended budget levels.

A total of 45 research centers, including one new molecular neurobiology center, are incorporated in the FY 1991 budget request. These centers are provided $55.4 million, a 3 percent increase over the FY 1990 level. This amount incorporates across-the-board reductions to the individual project budgets recommended by the reviewers, in order to fund a new center and to avoid elimination of current centers. Each HIV/AIDS center will be funded at approximately 6.5 percent below recommended budget levels, while individual non-AIDS center budgets will be reduced by 7 percent.

Other research mechanisms including research career programs, instrumentation grants, small grants, and research contracts will be increased less than 2 percent over the FY 1990 levels. HIV/AIDS Cooperative Agreements will be augmented by $2,870,000 to support multi-site trials of behavioral strategies to prevent the further spread of HIV infection. The entire increase in these mechanisms occurs in the HIV/AIDS programs, while the non-AIDS programs retain the FY 1990 dollar level. The total for these programs is $40,288,000 in FY 1991.

The Institute's high priority on research training is reflected in the increase of 31 trainees in the total of 1,206 requested for FY 1991. Funding of $25.8 million, a 6.4 percent increase over FY 1990, is included to support these trainees at competitive tuition, support, and stipend levels.

NIMH's intramural research program budget receives a 6 percent increase to $81.9 million in FY 1991, while maintaining the FY 1990 FTE level of 597. The increase will fund built-in increases in personnel and support costs for the current level of research activity.

The FY 1991 research management and support budget request of $42.6 million and 403 FTEs, maintains the FY 1990 level of effort. A 6 percent, $2.5 million, increase over the FY 1990 dollar level is included to fund built-in increases in personnel and support costs.

The research plans and priorities discussed above will provide overarching guidelines for the NIMH research agenda well into the coming decade. More specific descriptions of recent accomplishments and major opportunities in NIMH-supported research follow.

SCHIZOPHRENIA RESEARCH

Schizophrenia is a complex, extremely puzzling condition--the most chronic and disabling of the major mental disorders. Nearly 3 million Americans will be afflicted with schizophrenia during the course of their lives, and about 100,000 schizophrenic patients are in mental hospitals on any given day. In addition to the personal distress and disability caused by schizophrenia, its cost to society is estimated at over $40 billion annually in treatment costs and lost income. Of the major health problems of this century, none combines the frequency of occurrence, degree of disability, and squandered human potential that characterizes schizophrenia.

In 1986, NIMH designated schizophrenia as its foremost research priority. In FY 1989, NIMH spent $82.6 million on research focusing directly on or related to this disorder. Establishing schizophrenia as a research priority reflects the extraordinary advances in basic and clinical research that at last make it possible to challenge this disorder.

New Medication for Schizophrenia

A major collaborative research study sponsored by NIMH has demonstrated that clozapine, a new antipsychotic medication, is effective with schizophrenic patients who do not respond to traditional antipsychotic medications. It may also pose less risk of the side effects seen with the older treatments. Based on these findings, the Food and Drug Administration has approved clozapine (which has recently been introduced in Europe) for clinical use in the United States. Further research on clozapine--which differs from other antipsychotic medications in its mode of action on the brain--may offer new insights into the biological basis of schizophrenia, and may also provide a model for developing even safer and more effective treatments for this disorder.

Mechanisms of Drug Treatment

NIMH intramural investigators are also exploring entirely new classes of drugs for treating schizophrenia. One strategy is to target neuropeptides--messenger chemicals that fine-tune the action of dopamine at its neuronal receptor--rather than altering the levels of dopamine itself. The investigators have found that certain neuropeptide messenger chemicals operate only in the brain's dopamine pathway that is responsible for the desired antipsychotic effects. These chemicals are not present in another dopamine pathway that is associated with tardive dyskinesia--an undesirable neurological side effect of classical antipsychotic medications--and with Parkinson's disease. Studies are underway in animals to find agents that act only on the neuropeptides in the appropriate system. Further studies based on these findings may lead to new, more specific antipsychotic medications that have fewer side effects than those now in use.

Genetics of Schizophrenia

There is evidence that schizophrenia and related disorders occur particularly frequently in certain families, and twin and adoption studies suggest that genetic factors are involved. However, the modes of genetic transmission of these disorders are not yet clearly understood.

Studies using genetic linkage strategies, which provide a way to test the hypothesis that one or several genes underlie susceptibility to a disorder, have produced a number of important findings. For example, linkage of schizophrenia spectrum disorders to chromosome 5 has been demonstrated in seven families. Other families with schizophrenic members do not show this linkage, a finding that suggests--as scientists had long suspected--that there are multiple genetic causes for schizophrenia. The NIMH molecular genetics initiative supports studies clarifying these genetic mechanisms.

Structural and Functional Brain Abnormalities in Schizophrenia

NIMH intramural research studies using brain-imaging technologies are helping to pinpoint structural and functional abnormalities in the brains of schizophrenic patients. Abnormalities in brain structure appear to occur early in the course of schizophrenia and may even precede the onset of the illness. MRI (magnetic resonance imaging) scans of identical twins--one schizophrenic and the other unaffected--have revealed subtle signs of brain atrophy (shrinkage) in the ill twin, such as slightly larger ventricles--cavities in the brain filled with cerebrospinal fluid. Since the normal twin serves as a genetically identical control, differences observed in the schizophrenic twin are likely to be caused by the illness rather than by normal genetic variation in brain structure.

In other studies of these twin pairs using functional brain imaging techniques such as regional cerebral blood flow (RCBF), NIMH intramural investigators have now found less activity in the ill twin's frontal lobes while performing a simple card-sorting task. Patients who show the most reduced frontal-lobe activity under such conditions also have markedly enlarged ventricles and more pronounced negative symptoms (flat affect, social withdrawal)--all signs that these patients have a more severe subtype of schizophrenia.

In another NIMH study using PET (positron emission tomography) imaging, 17 unmedicated schizophrenic patients showed lower-than-normal metabolism in their mid-prefrontal cortex while performing an auditory attention task. After the patients were put on antipsychotic medication, those whose performance on the task improved also showed an increase in prefrontal brain activity. This finding suggests that abnormal function of the mid-prefrontal cortex may underlie the difficulty many schizophrenic patients experience in sustaining attention to particular tasks.

The twin findings on brain atrophy in schizophrenia are consistent with postmortem neuroanatomical studies suggesting localized brain degeneration in schizophrenic patients. Preliminary results from a study of the cell architecture of the affected regions indicate that cell structures are abnormal in many patients. These results suggest that the pathological brain changes found in schizophrenia may be the result of an early developmental anomaly.

Immune Function in Schizophrenia

An NIMH intramural investigator recently reported evidence that schizophrenia may involve an autoimmune process. A study in rabbits revealed that influenza viruses can induce the production of anti-brain antibodies, and prenatal exposure to influenza has recently been linked to increased risk for schizophrenia.

Using a computerized protein-mapping technique, intramural neurogeneticists have discovered an abnormal protein in the cerebrospinal fluid (CSF) of nearly one-third of schizophrenic patients studied, which also appears in the CSF of patients with known viral illnesses. No evidence of the protein was found in the CSF of normal individuals or manic-depressive patients. The presence of a protein associated with viral illness in some schizophrenic patients provides additional support for the hypotheses that viruses or autoimmune mechanisms may be involved in schizophrenia.

An intramural investigator has found that schizophrenic patients have abnormally high levels of receptors for the immunotransmitter interleukin-2. Patients with rheumatoid arthritis and other autoimmune illnesses have similarly suspect immune-cell and IL-2 profiles, suggesting that schizophrenia also may involve autoimmune mechanisms. These clues dovetail with other findings about schizophrenia, such as epidemiologic studies showing a conspicuously low incidence of rheumatoid arthritis among schizophrenic patients. The hypothesis is that the autoimmune disorder has two possible targets--the brain and the musculoskeletal system--and that one or the other, but usually not both, are affected.

DEPRESSION AND OTHER AFFECTIVE DISORDERS

Depressive disorders are among the most prevalent and debilitating of mental disorders. Nearly 10 million Americans, or 4 percent of the population, experience a major depression during any 6-month period. Depression affects people of all ages, socioeconomic classes, races, and cultures; studies show that rates of depression appear to be increasing among younger populations. Moreover, research has shown that depression is far more chronic than was previously thought; many people experience eight or more depressive episodes over the life course. The annual financial burden caused by depressive disorders is estimated to be in excess of $16 billion dollars in medical costs and lost productivity--just one reflection of their widespread societal impact. NIMH support for research directly on or related to the affective disorders totalled $117.5 million in FY 1989.

Disability Caused by Depression

Depression is far more debilitating than is generally recognized. For example, a major new study of 11,242 outpatients in three health care delivery systems in different areas of the country now has provided the first comprehensive data on how depression affects well-being and overall functioning. Patients with depression were compared with outpatients who had one of eight other chronic health problems: hypertension, diabetes, coronary artery disease, angina, arthritis, back problems, lung problems, or gastrointestinal disorder. The study examined the effects of the different illnesses on days in bed; bodily pain; role performance at work, at home, or in school; social functioning with friends and relatives; and physical activities such as dressing, bathing, climbing stairs, walking, and engaging in sports.

Patients with depression had significantly worse social functioning than patients in each of the eight other chronic conditions. Role functioning of the depressed patients was significantly worse than that of patients in six of the chronic conditions, and the depressed patients spent significantly more recent days in bed than did patients with four of the chronic conditions. These results show that depression is as debilitating as many chronic illnesses whose adverse impact on patients' lives is more widely recognized.

Biochemical Tests for Depression

Just as depression has no simple cause, there is no simple test for this disorder. NIMH researchers are refining a new generation of brain chemical measures that are leading to more reliable diagnoses and are revealing more about the underlying disease processes. Although they are still research tools, some of new tests will someday find their way into clinical practice.

One test may be based on the NIMH discovery that depressed patients have abnormal variations in levels of the neurotransmitter norepinephrine in blood plasma when they stand up. The rise in plasma levels of this chemical messenger upon standing is an automatic response that increases blood pressure and blood flow to the brain; thus, as a measurement, it is generally free of the psychological factors that often make other biological tests for depression difficult to interpret. When subjects lie down, plasma norepinephrine levels are significantly lower in manic-depressive (bipolar) patients than in either unipolar (depressed) patients or normal volunteers. But when they stand up, norepinephrine levels in patients--particularly those with bipolar illness--rise twice as much as in normal subjects, reflecting altered regulation of the system both in the brain and the rest of the nervous system. This finding makes it possible for the first time to distinguish, on the basis of biological tests, depressed from nondepressed persons and even patients with unipolar depression from those with manic-depressive illness. The finding also supports the possibility that depressive illness involves a disturbance in regulation of norepinephrine, rather than simply reflecting too much or little of this chemical messenger.

Treatment of Manic-Depressive Illness

During the past two decades, the treatment of manic-depressive illness has been dramatically improved by lithium therapy, which can effectively reduce symptoms in the majority of patients, prevent recurrent episodes, and allow patients to lead productive, normal lives.

Nonetheless, about one-third of manic-depressive patients do not respond adequately to lithium treatment or cannot tolerate its adverse effects. Furthermore, many patients who respond positively to lithium may still suffer episodes of illness, which, although less severe than prior ones, may significantly affect behavior and functioning. A recent NIMH-funded study has revealed, however, that recurrences in manic-depressive disorder can be substantially reduced if, instead of lowering the dosage of lithium once the acute episode has ended, higher lithium levels are maintained during periods of remission.

In addition to seeking ways to improve the efficacy of lithium treatment, researchers are seeking alternative treatments for manic-depressive illness. One of the most promising is the anti-convulsive medication carbamazepine, which has found a place in the clinical treatment of manic-depressive illness as an outgrowth of NIMH intramural animal studies on a phenomenon known as "kindling." Repeated electrical or chemical stimulation of the brain's limbic system increases its susceptibility to seizures. A similar "kindling" mechanism may lead to cocaine-related deaths; a dose of cocaine that is safe at the beginning of use can become lethal after extended use. The kindling mechanism is believed to play a role, as well, in manic-depressive illness. The discovery that the anticonvulsant drug carbamazepine can prevent or reverse kindling in animals led directly to a successful treatment trial of the drug for acute mania in manic-depressive patients who cycle rapidly between episodes of mania and depression. This study revealed no differences in overall efficacy of carbamazepine compared with lithium.

Chronic Fatigue Syndrome and Depression

Chronic fatigue syndrome (CFS) and depression present diagnostic challenges because many symptoms of these disorders overlap. However, a recent NIMH/NIAID collaborative study suggests that CFS and depression involve different underlying physiological processes. The researchers reported that CFS patients' stress-related hormones (ACTH and corticosteroids) failed to respond as robustly as normal subjects' when given experimental challenges with corticotropin releasing hormone. By contrast, depressed patients typically respond to the challenge with sustained elevations of these hormones. Since corticosteroids are normally released at times of stress to help the body cope with challenges, the inadequate production of corticosteroids by CFS patients could account for their fatigue following physical or emotional stresses.

Gender Differences in Depression

The finding that depression occurs more frequently among women than men has stimulated a search for the origins of these differences. Studies taking a developmental approach to this issue are revealing that the pattern of gender differences is quite different in younger age groups. Researchers at the

University of Pennsylvania and Princeton University have found that, among boys and girls in the third through fifth grade, boys show greater levels of depression than girls, although this difference begins to diminish in early adolescence.

Other NIMH-supported research has shown that the greater susceptibility of females to depressive symptoms begins in the ninth grade or during the middle adolescent years. Continuing research is examining factors possibly responsible for this divergence, including the nature and timing of school transitions, peer and family relationships and pressures, pubertal effects, and individual differences in styles of coping with stress and challenge.

Early adolescence may be a particularly sensitive period for the onset of depression and other stress-related psychological problems. It is at age 13 years (in about 7th grade) when some individuals first report feeling depressed, and depression is clearly related to a distinct pattern of sustained, rather negative moods, poorer attention, and decreased motivation.

ANXIETY DISORDERS

The anxiety disorders are the most frequent mental disorders recorded in the United States. According to figures from the NIMH Epidemiologic Catchment Area (ECA) study, 8.9 percent of adults during any 6-month period suffer from an anxiety disorder, the most common by far being phobias. The ECA study has also shown that obsessive-compulsive disorder, once thought rare, is in fact rather common. Agoraphobia, an anxiety disorder that keeps many people housebound, is now believed to be due to panic attacks.

Clinical Course and Treatment of Panic Disorder

The clinical course of panic disorder parallels that of depressive disorders in several important ways. For example, both disorders carry a high risk for suicide. Individuals with panic disorder are more than twice as likely as other individuals with mental disorders to attempt suicide, and nearly 18 times more likely than individuals with no psychiatric disorder. According to ECA data, 20 percent of those with panic disorder had made a suicide attempt at some point in life. Other ECA data document that people with panic disorder experience feelings of poor emotional and physical health, have impaired social and marital functioning, and use health services at levels that are at least comparable to those of people with major depression.

Increasing research evidence suggests that, although panic disorder seems to be related in some way to depressive disorders (panic disorder patients respond to some antidepressant medications), panic disorder is transmitted in families independent of depressive disorders. Furthermore, panic disorder appears to have a biological basis; a number of investigators have produced panic attacks in vulnerable subjects using intravenous infusions of lactate.

Recent findings suggest that both pharmacologic and psychotherapeutic approaches are useful in treating panic disorder. To assess and compare more systematically the effects of these treatments, a large NIMH four-site collaborative research study will investigate single-modality therapies (drug treatment or behavior therapy) and combined therapies in a rigorously designed clinical trial.

In light of recent progress in understanding and treating panic disorder, NIMH is collaborating with the National Institutes of Health (NIH) to sponsor a Consensus Development Conference on the Treatment of Panic Disorder, the first such conference on anxiety disorders.

Clomipramine Treatment for Obsessive-Compulsive Disorder and Obsessive Hairpulling

NIMH intramural researchers have found that trichotillomania, an irresistible impulse to pluck one's own hair, responds to the tricyclic antidepressant drug clomipramine, suggesting that it may be a form of obsessive-compulsive disorder (OCD), an anxiety disorder, rather than a disorder of impulse control, as it is currently classified. NIMH investigators had previously shown that clomipramine is also a singularly effective treatment for OCD, possibly because of its selective effects on the neurotransmitter serotonin.

Benzodiazepine Receptors and Anxiety

Intramural scientists have also pioneered in clarifying how benzodiazepines (anti-anxiety drugs such as Valium) work in the brain. They have demonstrated that alcohol operates in much the same way as benzodiazepines do (it exerts its brain effects through nerve cell receptors for the neurotransmitter GABA, stimulating uptake of chloride into these cells). Recently, the NIMH scientists discovered in the brain a steroid chemical, produced by the adrenal glands atop the kidney, that also acts like a benzodiazepine drug and may be the "brain's own Valium." This discovery could lead to a new class of anti-anxiety medications.

MENTAL DISORDERS OF THE AGING

Mental disorders of the aging are prevalent, often devastating, and difficult to treat. NIMH research in this area encompasses studies of depressive and psychotic disorders that begin in the older years, as well as chronic psychiatric disorders. Special attention is given to Alzheimer's disease (AD), a progressive, dementing, irreversible disease that attacks the brain and is a leading cause of death among adults in the U.S. The total NIMH investment in research directly focusing on or related to disorders of the aging was $35.2 million in FY 1989.

Alzheimer's Disease and Related Dementias of the Elderly

Five percent of the elderly suffer from senile dementia, the principal form being Alzheimer's disease. While the pace of progress in research on Alzheimer's disease has been rapid, the origins of Alzheimer's disease are still elusive, and no truly effective treatment has yet been discovered. Thus, most NIMH research focuses on basic mechanisms that may cause Alzheimer's and related diseases--such as the contribution of genetic factors--or examines possible clues to treatment. The Institute also is exploring the use of biological and behavioral techniques to improve the memory deficits characteristic of Alzheimer's disease, and is developing family care and service delivery models to reduce the severe stress often experienced by family members who care for an Alzheimer's disease patient.

One important direction of research in AD involves collecting blood samples from patients and their close relatives and isolating and storing the DNA for use in molecular genetic analysis. This effort will establish a permanent cell line drawn from individuals with a form of AD that occurs frequently in certain families. It can be used to identify possible genetic defects in the disease and may provide the basis for a diagnostic procedure to identify those at risk of developing AD.

Diagnosis of Alzheimer's Disease

Diagnosis is a particularly important area of study since there is still no definitive test that can establish the presence of AD in living patients. Tests that may prove diagnostically useful are being pursued using the techniques of neuroimaging (with position emission tomography and magnetic resonance imaging), electrophysiology (with new computerized mapping procedures), neuropsychology (in new tests of memory, language, and object use), and neurobiology and biochemistry (through analysis of blood and spinal fluid).

For example, a researcher at the University of Pittsburgh is extending and clarifying his initial findings of a blood platelet abnormality (e.g., increased membrane fluidity) in Alzheimer's disease patients. He now has evidence that this membrane abnormality identifies a subgroup of patients with distinct clinical features, including an earlier symptomatic onset, a more rapidly progressive decline, and greater likelihood of a family history of dementia. This form of Alzheimer's disease appears to be a stable trait that is transmitted in families through inheritance of an autosomal gene that is often expressed as clinical illness.

Most recently, this investigator has discovered that the genetic locus for this trait may be on the long arm of chromosome 21, where several other genes related to the biology of Alzheimer's disease have previously been localized. He is now beginning to do a linkage analysis study to determine definitively the specific chromosome 21 locus and to clarify the possible genetic relationship between this subtype and other forms of Alzheimer's disease.

Treatment of Alzheimer's Disease

Investigators are pursuing research on new medications that may reverse or retard the progression of the disease, while others are developing new approaches--both pharmacologic and psychosocial--to treat associated psychotic or behavioral symptoms, such as wandering, agitation, and assaultive or aggressive behavior. These approaches to behavioral symptom management could lead to strategies for improved care for AD patients in the community and in nursing home settings.

A disturbance of the brain systems that use the chemical messenger acetylcholine is believed to be a central biological mechanism involved in Alzheimer's disease. Therefore, many treatment strategies are addressed to this brain system. Researchers at Southern Illinois University found that metrifonate, a long-acting drug that increases the availability of acetylcholine in the brain, appears to be a safe treatment that improves the mental abilities of Alzheimer's disease patients. The Illinois research team is now conducting a double-blind clinical trial of this promising medication.

Immune System Effects in Alzheimer's Disease Caregivers

Family members who care for a relative with a stressful chronic disease of the elderly such as Alzheimer's disease may be vulnerable to increased physical symptoms and illness as well as psychiatric disorders. Approximately 54 percent of such family caregivers--who are usually the patient's spouse or daughter--suffer from a depressive disorder, although, significantly, they have no greater personal or family history of such disorders than controls. They also have increased rates of depressive symptoms, anxiety, anger, and other stress-related symptoms.

A team of NIMH-supported researchers at Ohio State University has now shown that the stress of such chronic caregiving may also increase susceptibility to physical illness. Among people who had already been providing care to an Alzheimer's patient for an average of 4 to 6 years, their immune function declined during another year of care, while controls remained immunologically stable. When Alzheimer's patients died or moved to an institution, their former caregivers became less depressed than those who continued caregiving, but the immune function of former caregivers nonetheless continued to decline. These intriguing results may indicate long-term physiological alterations in caregivers following years of chronic stress. They also clearly highlight the need to develop ways to lessen the psychological burdens on family members who assume this very taxing role.

Depression in the Elderly

Depressive illness is now widely recognized as a major cause of illness and death in older people. Recent data have revealed that people 55 and over with a diagnosis of recent depressive disorder had an increased risk of dying within 15 months of their first survey interview. These findings are not explained by differences in age, sex, physical health problems, or coexistence of other mental disorders. None of the depressed individuals who died during the study period had reported being treated for mental health problems by a mental health specialist or general medical practitioner in the 6 months prior to the first study interview.

Considerable progress is now evident in understanding and furthering the development of drug treatments for depression in the elderly. Tricyclic antidepressants (TCAs) are widely used and show good results in a large proportion of adults with depressive disorder. Elderly patients are particularly sensitive to the side effects of TCAs, however, and there is some evidence that elderly depressed patients do not usually respond as completely to TCAs as do young and middle-aged depressed patients. Researchers at the Duke University Clinical Research Center on Psychopathology of the Elderly have shown that, compared with younger patients and young and older normal controls, elderly depressed patients show a markedly reduced cellular sensitivity to the TCA imipramine. This characteristic of the older brain's nerve cells may explain the lessened therapeutic response to imipramine and other TCAs among older patients.

Schizophrenia in the Elderly

Schizophrenia usually first appears clinically in young adulthood, and later life onset schizophrenia has only recently been recognized as a diagnostic entity worthy of sustained research. Schizophrenia that first begins late in life is primarily a disorder of women (in contrast to the more frequent forms of adult schizophrenia), and is frequently associated with hearing loss. Researchers at the University of California at San Diego and at The Johns Hopkins University have initiated research programs focused on the pathophysiology of this disorder and on patients' responses to treatment.

NIMH research is also focused on older people who have had schizophrenia for most of their adult lives. Chronic schizophrenic patients who have grown old often still have symptoms, although "negative" symptoms (such as withdrawal), predominate, in contrast to the predominance of "positive" symptoms (such as hallucinations) in early adulthood. Older chronic schizophrenic patients constitute more than 25 percent of the case load of public psychiatric hospitals and account for up to half of the long-stay patients in these facilities. A focus for research on these patients has been developed within the Public-Academic Liaison (PAL) initiative of the Institute, and several investigators will be studying them in 1990 and beyond.

CHILD AND ADOLESCENT MENTAL DISORDERS

Mental disorders in childhood and adolescence are a major public health problem, often with lifelong impact. These disorders include autism, attention-deficit hyperactivity disorder, affective and anxiety disorders, eating disorders, and learning disorders.

As noted in the Overview, research progress concerning child and adolescent mental disorders has not kept pace with progress in understanding adult disorders, a problem that the new National Plan for Research on Child and Adolescent Mental Disorders is intended to remedy. Nonetheless, notable advances are being made within this field in improving the classification and diagnosis of mental disorders affecting our youth, understanding their scope and their causes, and in improving treatment. Efforts to improve the prospects of children at risk for mental disorders through preventive interventions are also producing encouraging advances. In FY 1989, NIMH provided a total of $90.1 million in research directly focusing on or related to child and adolescent mental disorders.

Epidemiology of Child and Adolescent Mental Disorders

Although reliable national epidemiological data are now available through the NIMH Epidemiologic Catchment Area (ECA) program for the distribution of mental disorders among adults, no comparable data are available for children. However, NIMH has recently instigated some essential methodological development necessary to mount a large multi-site epidemiologic survey on mental disorders in our Nation's youth.

The NIMH-sponsored Diagnostic Interview Schedule for Children (DISC) has been revised, and is now called the DISC-2. It is a highly structured psychiatric interview with parallel child and parent interviews. The DISC-2 is designed to be administered by trained lay interviewers in large-scale epidemiologic studies of mental disorders in young people ages 11 through 17. The usefulness of the DISC-2 in populations of children younger than age 10 is currently being assessed.

The DISC-2 was chosen for use by four collaborating research sites funded under a new NIMH program of methodologic research related to the epidemiology of childhood and adolescent mental disorders. This 3-year program will evaluate instruments, procedures, and research methodologies that could be used in a survey of children comparable to the ECA survey of adults. The goals of a multi-site survey include estimating the prevalence of mental disorders among children and adolescents, assessing risk factors for the development of mental health problems, and evaluating how and where families are obtaining mental health care for their children and the barriers to such care.

Attention-Deficit Hyperactivity Disorder (ADHD) and Serious Problems in Late Adolescence

ADHD is one of the most commonly diagnosed mental disorders among boys aged 6 to 12. An NIMH-funded study has revealed that boys who have pervasive ADHD (i.e., are hyperactive both at home and school) are at significantly increased risk for having a diagnosable mental disorder in late adolescence. Almost half of the hyperactive boys qualified for a psychiatric diagnosis in late adolescence, compared with about 17 percent of the late-adolescent male population in general. As teenagers, the hyperactive boys were far more likely than their peers who never had ADHD to have antisocial/conduct disorder, a drug-abuse problem, or ADHD. Almost one-third still had diagnosable ADHD as late adolescents, while 40 percent had at least two of the three original symptoms (hyperactivity, poor attention, or impulsivity). Fully 27 percent qualified for a diagnosis of antisocial personality or conduct problems.

Since pervasive ADHD in childhood is a risk factor for serious problems in young adulthood, appropriate treatment of this disorder is likely to have a significant impact in reducing later drug abuse and criminality. Preliminary studies indicate that proper treatment requires both medication and a variety of psychosocial interventions. NIMH is funding a number of studies to improve such comprehensive treatment for early ADHD.

Although the causes of ADHD are unknown, recent evidence from the NIMH Intramural Research Program suggests that the disorder may reflect a disturbance in brain function. In the first PET scan study of its kind, intramural scientists have shown unusually low metabolism in the posterior frontal region of the left hemisphere (a brain area known to be important in the control of movement) in adults with ADHD while they were performing an auditory attention task. All the adults were parents of children with the disorder and were themselves affected as children by this common mental disorder, which often runs in families.

Major Depressive Disorder in Children and Adolescents

Major depressive disorder (MDD) was long regarded as an affliction exclusively affecting adults, but its presence in children and adolescents is increasingly documented by research and becoming recognized in clinical practice. Within the last decade, there has been some agreement among investigators and clinicians that MDD can be diagnosed in children and adolescents using criteria similar to those used for adults.

Because research on depression in children and adolescents is just becoming established, and because of the problems noted above, epidemiological data cannot yet provide reliable estimates of the prevalence or incidence of depression in these age groups. However, two small, recent population studies suggest that MDD affects 1.7 percent of prepubertal children and 4.7 percent in adolescents; the adolescent rates appear to resemble those established for adults.

In contrast, school studies of adolescents ages 13 to 18, using self-reports of depressive symptoms (which have only a modest overlap with MDD diagnoses), found symptoms in nearly 20 percent, a rate much higher than in comparable studies of adults. Even if such symptoms are in fact much more common in adolescents than adults, it is not known whether their presence is normal, situational, or transient, or whether, and to what degree, they predict later depressive illness. Prospective studies are needed to determine the relationships between depressive symptoms and MDD diagnoses in both youths and adults.

Depression Risk in Children

In the first long-term prospective study of childrearing in 123 families, including those with a depressed mother as well as those with healthy mothers, NIMH intramural investigators are documenting that, compared with children with well parents, children of depressed parents have more frequent mental and emotional problems. They also tend to be less mature at each stage of development than their peers from normal families. Certain patterns of rearing behavior, more prevalent among depressed mothers, are associated with a high incidence of psychopathology in their children. These include extreme expressions of anger and sadness, excessive criticism, extreme avoidance of confrontation, and overreactivity to minor stresses. Daughters appear to be especially prone to learn their depressed mothers' negative patterns of reacting to life's stresses.

Childhood Depression and Later Mental Disorders

A long-term study of school-age children and adolescents (8-13 years old) with depressive disorders has documented the serious and often persistent nature of these disorders in young people; depression is not something that they "simply outgrow." A research team at the University of Pittsburgh has reported that 72 percent of children with a major depressive disorder eventually had another episode of MDD. In addition, 24 percent later developed anxiety disorders, 30 percent developed conduct disorders, and 17 percent developed manic-depressive illness. Of those children initially diagnosed as having mild, chronic depression (dysthymic disorder) at entry to the study, 62 percent later developed MDD, 27 percent developed anxiety disorders, 32 percent conduct disorder, and 29 percent manic-depressive disorder.

Depression Treatment in Children

The field of treatment research on depression in children is itself in its infancy. Little research evidence exists to guide effective treatment choices for this population. For example, fewer than 100 adolescents have been treated in controlled trials of tricyclic antidepressants (TCA)--medications of proven efficacy in treating adults with clinical depression. However, the findings suggest that seriously depressed young people do not respond to medication as adults do. While one highly promising NIMH-funded study of cognitive-behavioral group treatment for depression in adolescents is currently underway, there is a critical need for systematic research on psychosocial and psychopharmacologic treatments of depression in children and adolescents. Stimulating and developing treatment research is among the highest priorities for NIMH FY 1991 research focused on affective and anxiety disorders.

Autism

Autism is one of the most puzzling, severe, and chronic disorders affecting children's thought and language development. NIMH-supported research using magnetic resonance imaging (MRI) of the brain has suggested that there is a structural abnormality in the brains of some individuals with this disorder.

Another line of research is exploring the possible role of genetic factors in this disorder. A researcher at The Johns Hopkins University is studying families of autistic patients to determine whether a milder variant of autism exists in first- and second-degree relatives of those patients. The investigator had hypothesized that the milder variant would manifest itself as a deficit in language and communication. The actual deficit turned out to be in social relationships: These families have an overrepresentation of "normal but odd" persons who do not understand or know how to respond to social cues. Even more surprisingly, these same "odd" family members have high levels of the neurotransmitter serotonin in their blood platelets--a marker, still to be explained, that has long been associated with autism. These findings support the possibility of a strong genetic role in some forms of autism.

ANTISOCIAL AND VIOLENT BEHAVIOR

Antisocial and violent behaviors are often symptomatic of serious mental health problems and place victims at risk of mental and emotional impairment. Through research and research training in the behavioral, biological, and psychosocial sciences, NIMH seeks to improve understanding of the causes and consequences of antisocial and violent behaviors in children, youth, and adults and to develop more effective assessment and treatment services for perpetrators and victims. Specific foci of NIMH research include serious conduct problems in childhood and adolescence, physical abuse of family members (domestic violence), and sexual abuse and assault.

Antisocial Behavior

Behavior problems and aggressiveness account for one-third to one-half of all child and adolescent clinic referrals annually. Such behaviors also place children at later risk, as adults, of alcohol abuse and mental disorder as well as criminal arrests and convictions. To learn more about the causes and course of such behavior, NIMH-funded researchers at the University of North Carolina are studying two samples of youths who were tracked when they were in the fourth and seventh grades. Over the next 3 years, these 695 youths will be seen at 18 to 20 years of age, a critical transition stage in the life cycle when they are expected to be vulnerable to a range of mental health problems. The study results are likely to aid in understanding the etiology, course, and transmission across generations of physically assaultive behaviors.

In a more biological approach to understanding the origins of aggression, researchers at Georgia State University are examining the role of the male sex hormone testosterone in aggressive behavior. Testosterone levels have been found to be an important biological factor in animal aggression studies, but their role in human aggression is unclear. Results to date indicate that prisoners with high levels of testosterone often had committed violent crimes and had certain personality characteristics associated with competitiveness, expressiveness, and sensation-seeking.

Sexual Abuse

NIMH-supported studies in recent years suggest that the lifetime prevalence of sexual assault among adult women is high (at least 20 percent, representing about 18.4 million women), and that sexual assault and rape dramatically increase victims' risk for mental health problems and disorders. However, no nationally representative data on the prevalence and mental health impact of sexual assault are yet available, and causal connections have not yet been empirically established between being sexually assaulted or raped and developing mental disorders.

In light of this need, efforts will be made over the next year to encourage the development of research addressing the incidence, prevalence, and mental health consequences of sexual assault (through a nationally representative panel study involving a culturally diverse sample of the general population as well as minority populations and selected high-risk groups, such as children and adolescents). In addition, studies will be encouraged on the relationship between being sexually assaulted and developing post-traumatic stress disorder and on the treatment needs of women who are beyond the immediate post-victimization period (only about 5 percent of sexually assaulted women seek mental health counseling or crisis services immediately following the assault).

Violent Behavior in the Mentally Ill

In FY 1991, using research recommendations from a FY 1990 workshop, NIMH expects to stimulate research on violent behavior in the mentally ill. Such research will address the nature, extent, and circumstances surrounding violent behavior in the mentally ill; the identification of possible subgroups of the mentally ill most likely to engage in violent behavior; and ways to improve prediction and prevention of such behavior.

EATING DISORDERS

Anorexia and Bulimia

Anorexia nervosa and bulimia nervosa are debilitating eating disorders that affect an estimated 5 percent of adolescent and young adult women (3 million people) in the United States. Mortality rates for anorexia nervosa are high: 5 percent within 5 years of diagnosis, 6.6 percent within 10 years, and 16 percent within 20 years.

Investigators at Duke University are attempting to clarify neurobiological correlates of these eating disorders. Using magnetic resonance imaging (MRI) to study changes in the brain, they have found that both anorectic and bulimic patients show evidence of severe brain shrinkage or "pseudo-atrophy," which gradually returns to normal over 4 to 10 months of treatment. Those patients with a history of frequent vomiting demonstrate the most brain atrophy on MRI. In about half of these patients, the brain shrinkage resembles that seen in normal 70 to 80 year-olds, although none of these patients is over 30.

Hormone-like natural chemicals found in the brain may play a role in these eating disorders. NIMH research has revealed that, after eating, bulimic patients show a marked decrease in the secretion of cholecystokinin (CCK), the satiety-inducing peptide, and they feel less full than normal individuals do. The patients also have increased levels of a cerebrospinal fluid peptide known to significantly increase hunger.

Obesity

Recent NIMH-funded research is clarifying the role of genetics in another eating problem, obesity. The definitive evidence for genetic determinants in human obesity was first obtained by NIMH-funded researchers at the University of Pennsylvania. Building upon their earlier studies of adoptees and twins, these investigators have begun elucidating how genetic transmission occurs.

Over the past year, these investigators analyzed data comparing the adoptees with their siblings and half-siblings who were raised in different environments. Their findings have raised for the first time the possibility that the disorder may be transmitted through a recessive gene. The researchers have also found important evidence that some forms of obesity may be inherited by Mendelian transmission--a relatively simple mode of inheritance--rather than involving many genes. If this finding is borne out by further studies, it may pave the way to identifying a specific gene for obesity.

PREVENTION RESEARCH

NIMH encourages research to discover, test, and improve methods of preventing mental illness and promoting mental health. Preventive intervention research is conducted with high-risk populations who are either symptom-free or who have early, mild symptoms short of full-blown mental disorder. The interventions, which are intended to avert, interrupt, reverse, or halt the processes that lead to dysfunction and disorder, are often targeted to infants or young children at developmental risk due to adverse biological or environmental conditions. NIMH supports a very wide variety of research related to prevention of mental disorders, including basic, clinical and applied approaches, and funding comes from many Institute program branches.

Identifying Risk Groups for Preventive Interventions

To aid in designing and targeting preventive interventions more effectively, NIMH supports a number of studies aimed at specifying the processes that increase or reduce the risk of mental illness among vulnerable groups. For example, researchers at the State University of New York at Stony Brook found that school-aged and young adult children of parents with psychiatric disorders showed significantly higher rates of maladjustment and disorder than did normal controls. These findings are from an extensive examination of long-term data from the Stony Brook High-Risk Project on 231 families and 583 children with a schizophrenic parent, a depressed parent, an alcoholic parent, or normal parents.

The study revealed that the children with a schizophrenic parent were least able to maintain attention and ignore irrelevant information; they also differed from children with normal parents across an entire battery of attentional and cognitive measures. Schizophrenic parents rated their children as distractible and prone to emotional upset. Children with a depressed or alcoholic parent showed similar patterns of abnormal information processing and social emotional functioning, even on variables supposedly specific to schizophrenia. In general, children who were doing poorly tended to come from families with increased strife, discord, and disorganization. Even among these families, however, some children were functioning well.

High-Risk Infant Research

Programs aimed at preventing maladaptive parenting and improving children's chances for optimal development have flourished over the past several decades. Earlier programs focused on stimulating motor and cognitive development. Later, more comprehensive programs included family participation, social services, and health and educational components. More recently, interventions funded by NIMH have focused directly on the quality of parent-child emotional relationships, on the child's socio-emotional competence, and on combinations of the two. In addition to a long-standing interest in prematurity and multi-risk families, NIMH has more recently begun to focus upon early risk factors--such as mental illness in parents, and poor quality of attachment--that predict later child disorders.

A researcher at the University of Connecticut has developed an intervention with premature infants that may prevent some of the mental and emotional dysfunction seen in older, prematurely born children. By stimulating these infants' quiet sleep, weight gain, and stability, the intervention is expected to increase the infant's social responsiveness, improve the mother-infant relationship, and aid psychosocial development. These changes should reduce the chances of developing later mental and emotional disability.

The intervention involves the use of a rhythmic oscillator in the form of a "breathing bear companion" placed in the isolette with the baby. Because the infants are allowed to touch, cuddle, or ignore the bear, they can choose when they want to be stimulated and for how long. The bear "breathes" smoothly and regularly, simulating the breathing of a very healthy infant. The researcher demonstrated that premature infants were capable of seeking and sustaining a high level of contact with the "breathing bear." In addition, the experience of actively seeking contact was associated with greater brain maturation, as indicated by increased amounts of quiet sleep.

Prevention of Conduct Disorder

Children with conduct disorder show a persistent pattern of problematic, noncompliant, and defiant behaviors that violate the basic rights of others. Such children are also often identified as delinquents. It is estimated that up to 10 percent of boys 7 to 10 years of age exhibit this disorder, which is most prevalent in inner city areas, is three times more prevalent in boys than in girls, and is the most frequent reason for referral of children to outpatient mental health services.

Interventions aimed at preventing conduct disorder have focused on fostering behaviors such as cooperation and other positive social skills that are inconsistent with problem behaviors. Some interventions also attempt to change the cognitive processes underlying social behaviors (e.g., by fostering new ways of thinking). Another strategy has been to foster verbal and other academic skills to reduce "acting out" in the classroom associated with poor academic performance. Parent management training has also been used as an intervention for conduct disorder, and some investigators have adopted more comprehensive approaches.

Researchers at the University of Pittsburgh have found that 9- to 10-year-old boys at risk for conduct disorder who participated in a 2-year school-based prevention intervention showed a decrease in antisocial behavior and symptoms. The boys were also less likely to attribute negative characteristics to others, a pattern often associated with antisocial behavior. The study compared untreated children with those who received a combination of interpersonal cognitive problem-solving and behavioral social-skills training through classes conducted in 32 elementary schools.

Prevention of Depressive Disorders

NIMH-funded projects aimed at preventing depression have focused primarily on those at risk because of life events such as bereavement, job loss, or immigration status. Other high-risk groups to be examined in future studies include children of depressed parents.

Research now shows that, among adults, intervention can prevent the early symptoms of depression from progressing to a fully diagnosable case of the disorder. A team of researchers at San Diego State University has developed a community-based group intervention, delivered by paraprofessionals, that is among the very first to demonstrate primary prevention of specific mental disorder symptomatology. The intervention may provide a model for reaching large numbers of at-risk individuals before they become mentally disabled and require costly professional services.

The San Diego study, known as the Hispanic Social Network Prevention Intervention Study (*Projecto Bienestar*), involved a community trial comparing two 12-week interventions (one-on-one contact versus group intervention) and one control condition. Included in the study were high-risk, low-income Mexican American women aged 35 to 50 who had no pre-existing medical or psychiatric disorders or severe depressive symptoms. Both individual and group interventions were conducted by *servidoras*, female indigenous natural helpers who had previously shown interest and skill in helping other Mexican American women with a wide range of daily problems. The *servidoras* were trained by the professional staff using a standard curriculum, and were closely supervised.

EPIDEMIOLOGY AND PSYCHOPATHOLOGY RESEARCH

The need to understand the scope and distribution of mental disorders in the population is an issue that cuts across all disorders and many types of research. In addition to focusing on specific disorders, as discussed above, NIMH supports a variety of projects directed at improving epidemiological methods and examining generic classes of risk factors.

Assessment and Classification

Substantial progress is being made to improve standardized methods for assessing and classifying psychopathology. NIMH is working closely with the World Health Organization (WHO) to develop and test a draft version of the Tenth Revision of the International Classification of Diseases (ICD-10) related to mental and behavioral disorders. Worldwide field tests of this draft have been completed, and efforts are beginning to evaluate the companion document dealing with diagnostic criteria for research. These criteria, which will also be field tested internationally, will help in establishing a reliable international standard for diagnosing psychiatric disorders.

Co-Morbidity Studies: Mental Disorders and Substance Abuse

In accordance with the Public Health Service Act as amended by the Anti-Drug Abuse Act of 1988, ADAMHA is collecting data on the national incidence and prevalence of co-occurring mental and substance abuse disorders. ADAMHA is also responsible for conducting studies to determine the relationship between mental illness and substance abuse. In response to these legislative mandates, NIMH has used funds from the FY 1989 ADAMHA ADMS Block Grant Set-Aside to support the first year of a study of the prevalence rates, risk factors, service needs, and service availability for mental disorders co-occurring with substance abuse disorders in a nationally representative community sample.

Emergency/Disaster Research

Understanding the mental health consequences of exposure to catastrophic events, such as natural and technological disasters, mass violence, accidents, and epidemics, is the focus of the NIMH emergency/disaster research program. Newly funded projects include a study of the developmental effects of early severe trauma on Cambodian refugee children and the first study of the role of primary care workers in providing mental health care to victims of a major volcanic eruption in Colombia. Another ground-breaking study focuses on assessing psychopathology in Beirut residents exposed to 14 years of extreme war stress (e.g., killing, sniping, displacement, kidnapping). It will be the first study to examine systematically how coping with chronic severe trauma affects mental health.

A newly funded project at Yale University is pioneering biological approaches to the characterization of post-traumatic stress disorder (PTSD). Early findings from this study of Vietnam veterans suggest that the use of multiple hormonal measures may provide important advances in the use of biological criteria in psychiatric diagnosis.

Recent large-scale disasters in the United States (Valdez, Alaska oil spill, Hurricane Hugo, Loma Prieta, California earthquake) will be the focus of additional disaster mental health research. For example, in the planning stages are projects that will focus on how exposure to extreme stress (San Francisco earthquake, Puerto Rico hurricane) affects the immune systems and psychological states of HIV seropositive and seronegative gay men and intravenous drug users whose psychiatric status was assessed prior to the disasters. Also planned is a project that will develop a valid measure of traumatic stress in children.

BASIC BRAIN AND BEHAVIOR RESEARCH

The basic research projects supported by NIMH are the springboards from which new concepts and theories are developed and expanded to improve the diagnosis, treatment, and prevention of mental disorders. Conversely, clinically derived results also point to new directions in basic research. The scope of the NIMH basic research program is therefore quite broad. The Institute supports and conducts basic studies on isolated neuronal cell populations, on simple invertebrate systems, on human behaviors and life processes at various developmental stages, and on the ways in which the brain affects and is affected by other medical illnesses.

Since the declaration by President Bush of the 1990s as the "Decade of the Brain," NIMH has set into motion a number of important new activities designed to stimulate further progress in neuroscience research, one of the most exciting and promising areas of mental health research. Some of those initiatives are discussed above, as a part of the National Plan for Research on Schizophrenia and the Brain.

The recent research accomplishments and opportunities for future NIMH research described below underscore the central role of technological advances such as molecular genetics and linkage studies, brain-imaging techniques (e.g., PET, MRI, SPECT), and molecular biology approaches in clarifying the fundamental origins of mental disorders. These methods have greatly aided both biological and behavioral research.

Neurotransmitters

A major goal of the NIMH basic research program is to understand the development and function of the nervous system and its role in mental health and illness. One approach involves discovering molecular mechanisms that underlie specific biological phenomena, such as the synthesis, release, and action of neurotransmitters in nerve cells. Investigators are isolating and characterizing molecules with important roles in the brain and peripheral nervous system. Examples include the protein molecules that serve as receptors for neurotransmitters on nerve cells, as well as molecular factors that regulate all growth and differentiation. Information about such molecules is of practical importance; cloned receptors can be used as tools for screening new drugs, and the sequences of viral receptors can be used as a starting point for synthesizing antiviral compounds.

Neuromolecular and Behavioral Genetics

Behavioral genetic research in animals and humans plays a unique role in determining the origins of certain psychological and behavioral disorders. For example, NIMH-supported research with relatively simple organisms, such as fruit flies, allows researchers to examine how heredity affects learning processes. Researchers are measuring individual differences in conditioned learning and are identifying gene correlates of the behavior. Such studies provide important models for behavioral genetic analysis of more complex human behaviors.

More clinically oriented NIMH-supported genetic research at the University of Colorado is using recent advances in genetic linkage to examine the behavioral disorder of dyslexia. Study of this disorder has been complicated by the fact that dyslexia appears to have many clinical forms, which stem from quite varied causes. The Colorado researchers have identified two groups of subjects with familial dyslexia whose disorder stems from different genetic sources: The members of one group have an apparently dominant form that is linked to chromosome 15, while preliminary results in another group suggest a second major locus on chromosome 6.

Preliminary evidence also indicates that there may be connections between familial subtypes of dyslexia and other disorders (e.g., depression, attention-deficit hyperactivity disorder, and immune disorders) that co-occur in dyslexic individuals or their family members; these disorders may share abnormalities on closely related gene sites. Other studies will be required to determine which ones are causally related to the clinical forms of dyslexia, and in what way.

The recently initiated Colorado Adoption Project, a prospective longitudinal study of adjustment in early adolescence, is making use of data from both biological and adoptive parents. The study is examining the origins of individual differences in mental health and adaptation in a sample of 1500 adopted and nonadopted adolescents. Another new project is drawing upon principles from both behavioral genetics and from family systems theory to explain individual variability in psychosocial and behavioral outcomes among siblings. Such integrative approaches can clarify how both heredity and environment contribute to the development of major disorders such as depression, antisocial personality, and schizophrenia.

NIMH intramural investigators are using the powerful tools of molecular genetics in their efforts to unravel the workings of brain chemical messenger systems. In the process, they are making discoveries that promise a new generation of treatments based on an in-depth knowledge of how psychoactive drugs produce their effects. For example, recent research into the mechanisms by which marijuana acts in the brain may lead to a new class of medications that would exploit medically useful properties of cannabinoid (marijuana-like) compounds, free of their undesirable side effects.

Another group of intramural scientists has isolated the genetic material that makes a cannabinoid receptor. The distribution of these genes is being mapped to identify possible subtypes and to study their functions and biochemical properties. Relatedly, a neuroanatomist in the Intramural Research Program has produced the first autoradiograms showing the location of cannabinoid receptors in the brain. The presence of these proteins on nerve cell membranes suggests that there may be an as-yet-undiscovered natural messenger chemical in the brain that is similar to THC, the active ingredient in marijuana.

A novel way of administering medication has resulted from another type of molecular genetics research within the NIMH intramural program. After cloning and finding the chemical structure of the gene for tyrosine hydroxylase, the enzyme that makes the neurotransmitter dopamine, investigators developed a new way to deliver medication to the brain, which may prove useful in treating Parkinson's disease. They inserted the tyrosine hydroxylase gene into a neutralized virus, turning it into a delivery vehicle for the gene, then infected mouse skin cells with the virus. In culture, these recombinantly altered cells then made L-dopa, the chemical that brain cells use to make dopamine. (Parkinson's disease is caused by loss of dopamine-producing cells in a certain part of the brain.) Studies are now underway to test the efficacy of transplanting the dopamine-producing cells to this brain region to correct a movement impairment in an animal model of Parkinson's disease.

Neuroimmunology Studies

Neuroimmunology is a new branch of neuroscience that is discerning how the brain affects the body's immune system and vice versa. The immune system has built-in controls that normally keep it properly responsive to foreign invaders, such as bacteria and viruses. However, these controls can go awry, and scientists have shown that changes in a person's brain function, as well as in his/her psychological state, such as in bereavement, can reduce immune system function.

Interactions between the nervous system and the immune system and their effects on behavior are being explored. For example, intramural researchers have found that an immune system event can profoundly elevate levels of stress hormones for months. A joint NIMH/NCI (National Cancer Institute) research team has discovered that cancer patients being treated with the immunotransmitter interleukin-2 (IL-2) experience dramatic increases in blood levels of beta endorphin, adrenocorticotropic hormone (ACTH) corticosteroids, and (to a lesser degree) corticotropin releasing hormone (CRH). These stress hormones soar even higher with each repeated course of IL-2 treatment. These findings suggest that the neuroendocrine system can be sensitized or conditioned by the immune system, dramatically altering regulation of the stress response for an extended period of time.

Mounting evidence suggests that natural opiate systems in the brain play a role in the regulation of the immune system. In an NIMH/NIDDK-(National Institute of Diabetes and Digestive and Kidney Diseases) collaboration, investigators have linked the binding of man-made opiates in a specific brain area (the periaqueductal gray matter--PAG--of the mesencephalon) to suppression of immune responses. NIMH scientists report that morphine injections into the PAG, alone among six brain areas studied that are rich in opiate receptors, resulted in suppression of natural killer cell activity, an index of immune function.

Neural Bases of Cognitive Function

Developmental brain studies figure prominently in NIMH research on behavioral and biological correlates of cognition and learning. NIMH-supported research at the University of Pennsylvania, for example, is examining relationships between maturation of the brain's frontal lobe and cognitive development during the first 2 years of life. This work will chart the precise developmental progression for acquiring the basic cognitive skills known to involve the frontal lobes. This research may also lead to standardized, noninvasive markers for assessing central nervous system damage during early development.

Other new directions for cognitive research include brain-behavior studies involving specific structures such as the corpus callosum (the bundle of fibers linking the left and right hemispheres) and the hippocampus (a brain area centrally involved in memory). Earlier studies were concerned with identifying where in the two brain hemispheres different kinds of cognitive, perceptual, language, and spatial information were processed. Current research is now addressing information-processing activities in specific brain structures.

Research conducted at Syracuse University, for example, is directed toward clarifying the role of the corpus callosum in behaviors that are primarily associated with a single hemisphere. Such behaviors include processing cognitive information such as language in the brain's left side and affective (emotional) information in the right side. The particular focus of study is emotional expression in young children during the pre-language period (right-brain processing) and the switch that occurs when children develop toward fully linguistic expression (left-brain functioning).

Researchers at the Salk Institute and at the University of California, San Diego are developing a high-resolution technique for the noninvasive imaging of the human hippocampus. This new technique permits them to view the hippocampus in exquisite structural detail, revealing for the first time brain abnormalities in patients with amnesia. It has shown that in memory-impaired patients, the hippocampus is abnormally small--almost half the size seen in normal controls. Additionally, the size of some nearby brain structures is also abnormal. These results clearly illustrate the value of anatomical studies and state-of-the-art imaging approaches in understanding the sources of severe cognitive deficits.

Emotions and Motivation

Recent research on the mother-infant relationship has documented the important role played by facial and vocal emotional expressions in early development. A number of NIMH-supported investigators have examined the emotional signals that appear very early in life in the context of caring for infants; this research has documented infants' considerable capabilities in detecting and interpreting these signals and in using them to regulate their own behavior.

Ongoing research at the University of Colorado, for example, has clarified the functional importance in early development of "social referencing"--a process whereby an infant, when unsure how to react to an ambiguous event, will seek out emotional cues from someone else, such as a parent or other caregiver. Social referencing is particularly influential and adaptive in the early years of life. This research has shown clear effects of mothers' facial and vocal emotional expressions on infants' behavior. For example, mothers' expressions of happiness or interest will foster babies' exploratory behavior, while expressions of fear or anger will inhibit this behavior.

Researchers at the Salk Institute are investigating the neuroanatomical basis of emotions through the study of the monkey and human amygdala, a brain structure known to be critical for emotion and motivation. They are focusing on determining the connections through which the amygdala receives sensory information and influences information processing in the sensory neocortex. The results of this study will aid understanding--at the cellular, neurochemical, and molecular levels--of this important brain structure's role in emotion.

MENTAL HEALTH SERVICES RESEARCH

NIMH mental health services research is concerned with improving understanding of how best to organize, finance, and provide mental health services to achieve the most beneficial and cost effective outcomes for patients and their families and communities. Services research, therefore, builds on the base provided by NIMH-supported basic and clinical research and cuts across all the specific disorders discussed above. A major emphasis of the services research supported by NIMH is on services for people with severe, long-term mental disorders. Beginning in FY 1991, NIMH's services research programs will benefit greatly from the coherent plan now being developed (and discussed earlier) under the name National Program of Research to Improve the Care of the Severely Mentally Ill.

Public Mental Health Systems

Most severely mentally ill people receive their treatment through public mental health systems. To bring services research to bear even more effectively on the needs of these systems and the people they serve, the Institute is engaged in several policy initiatives. Grants have been awarded on a competitive basis to 36 State mental health agencies to improve their mental health statistical data systems to aid in administrative decision-making and to provide a basis for future services research. These research activities by State agencies, as well as other services research in support of the Institute's Public-Academic Liaison (PAL) initiative, were undertaken with funds made available through the FY 1989 ADAMHA ADMS Block Grant Set-Aside. State agencies in California, Connecticut, Hawaii, Michigan, New York, Ohio, and Oklahoma competed successfully for grants that will enhance their services research capacity by undertaking evaluations of ongoing services programs for severely mentally ill persons.

Through the PAL initiative, the Institute is substantially increasing the development of cooperative relationships that involve academic researchers and staff of State mental health agencies in joint studies of the financing, delivery, and effectiveness of public-sector services. A major new development has been a grant award to the National Association of State Mental Health Program Directors (NASMHPD) for a national Public-Academic Fellowship Program that will assist more researchers to develop skills needed for effective design and conduct of studies on mental health service delivery in the public sector.

Services for Children and Adolescents

Good scientific research has been lacking on mental health services provided to children and adolescents and on the best ways to finance this care and coordinate it with services provided by educational, social service, and other agencies. Research is particularly needed on publicly financed mental health services for severely emotionally disturbed children and youth. An Institute initiative aimed at generating more services research on children and adolescents has resulted in a four-fold increase in the number of research grants awarded.

One of these new studies is assessing the costs and effectiveness of a model system of public-sector care known as the "Ventura model." That system is being used in three central California counties to provide and coordinate services for severely emotionally disturbed children and adolescents.

Another new study, conducted by two North Carolina universities and the North Carolina Department of Human Resources, is examining the long-term effectiveness of integrated child and adolescent mental health services involving active partnerships between mental health professionals and parents in the planning and delivery of needed services. A major part of this research involves assessment of long-term outcomes from the $60 million Fort Bragg Child and Adolescent Demonstration funded by the Department of Defense; this demonstration tests the effectiveness of an innovative system of community mental health services for children and adolescents who are eligible CHAMPUS beneficiaries.

Services for Minorities and Rural Populations

More research is greatly needed on the adequacy and effectiveness of mental health services for minority and rural populations. Through activities such as two workshops on minority services research held in Hawaii and Texas, and four rural mental health services demonstration grants awarded to State agencies in Iowa, Minnesota, Nebraska, and South Dakota, the Institute has been increasing the number of minority investigators in its services research program and the number of research grants focused on minority and rural services.

State agencies, facilities, and programs that are the primary source of mental health care for minority group persons are the focus of extensive NIMH research concerned with improving the organization, financing, and delivery of such services.

Several NIMH services research projects are focused entirely on minority populations. A multi-ethnic team of investigators is conducting a comprehensive inquiry into utilization and financing of mental health services among Asian, Black, and Hispanic populations in the San Francisco area. A team of Hispanic investigators at the University of Puerto Rico is surveying utilization of mental health services on that island with particular emphasis on Puerto Ricans in lower socioeconomic strata. A Hispanic investigator at Rutgers University is using data from the Hispanic Health and Nutrition Examination Survey (H-HANES) and other large data sets to investigate relationships between physician-evaluated health level, self-perceived health, and depression at different levels of acculturation in a large, representative sample of Mexican Americans. Black investigators at the University of Michigan and Yale University are using the NIMH small grant mechanism to conduct secondary analyses of two large data sets (National Health and Nutrition Examination Survey, and NIMH Epidemiologic Catchment Area) to study needs for and use of mental health services by Black populations. Research at

Rutgers University is examining how Black and Hispanic families cope with a mentally ill family member and make use of mental health services.

Minority populations are heavily represented in several other ongoing NIMH services research projects. For example, two studies at inner city hospitals in New York and Philadelphia that serve largely Black and Hispanic clients are investigating the most effective clinical combinations of alcohol, drug abuse, and mental health services for patients with multiple diagnoses. A research demonstration project is examining the effectiveness of establishing a team approach to providing case-management services to Black severely mentally ill persons released from the Philadelphia jail. Vocational rehabilitation services for severely mentally ill persons are the subject of an NIMH study in Chicago that is assessing programs servicing mostly Black and White clients. A study in San Diego is investigating the impact of routinely providing child screening information on the mental health of children to social workers in a large public foster care system in which most children served are Black, Hispanic, or Asian.

NIMH is also expanding research activities related to improvements in mental health service delivery to rural Americans. For example, a study being conducted at Ohio State University is replicating the rural portion of a survey of homeless people in Ohio that was originally conducted in 1984-1985. A 6-month survey is being conducted of all homeless people in a 21-county random sample that is representative of 75 rural counties in Ohio. In a separate data collection effort, the researchers will survey providers of services to rural homeless mentally ill persons in each of the 21 counties. This part of the study will examine what services exist, how sufficient they are, and how they are used by homeless mentally ill persons.

A Mental Health Services Research Center at the University of Wisconsin in Madison is specifically focused on systems of care for severely mentally ill persons in rural and small-city environments. The center is constructing and using a core data base that can be used to address key issues in service delivery. The data base will incorporate information on a year's experience of some 3,000 chronically mentally ill patients drawn from nine Wisconsin county systems. Data will include county and Medicaid expenditures, specialty mental health services, patient outcomes, and service system characteristics.

At the University of Nebraska, a researcher is developing and testing a comprehensive model that links changes in local economic conditions to depression, alcohol abuse, impairments of social roles brought about by these disorders, and help-seeking behavior. The researcher is also assessing how variations in informal support networks, access to formal services, and willingness to use social supports temper the psychosocial impact of economic events on individuals. The research covers a period of economic decline that has had devastating effects on rural sections of Nebraska most heavily dependent upon agriculture. Data are being collected through telephone interviews with a representative sample of 2,500 adults; of these, about 1,500 had been interviewed previously as part of an ongoing Nebraska Annual Social Indicators Survey. An additional 400 subjects are being selected for face-to-face interviews.

Services for the Severely Mentally Ill with Substance Abuse Disorders

Research on the effectiveness of services for severely mentally ill persons with co-occurring alcohol and drug abuse disorders was stimulated through a research announcement issued in January 1989 by the three ADAMHA Institutes. Grants have since been awarded to researchers at Duke University, Mercy Catholic Medical Center in Philadelphia, Beth Israel Medical Center in New York City, University of Massachusetts, Michigan Department of Mental Health, Medical Research Institute of San Francisco, and Santa Clara County in California. The Santa Clara project supports the Institute's PAL initiative through a collaborative relationship of researchers from the county mental health department and the Berkeley and San Francisco campuses of the University of California.

Service System Organization and Financing

Service systems research examines how mental health services can be organized and financed to deliver better and more cost-effective care, and NIMH supports a wide range of research in this area, including five research centers devoted to services research. As one example of recent progress and activities, with NIMH support, researchers at Harvard University School of Public Health are conducting a study to develop a Resource-Based Relative Value Scale (RBRVS) that can be used to reimburse psychiatrist services under the Medicare Part B program. The study is part of a larger research effort, supported by the Health Care Financing Administration (HCFA) and covering more than 30 medical specialties, to develop numerical scales that will rationalize and limit Medicare payments for physician services by linking fee schedules more realistically to actual physician costs and other resource inputs. Preliminary findings from this study indicate that payments to some medical specialties would be reduced if the existing RBRVS methodology were instituted in the Medicare Part B program, and that payments to other specialties (including psychiatry) would increase to bring Part B payments into line with the actual value of services received. NIMH is now supporting additional work by these researchers to refine the original study results for psychiatry to ensure that the final RBRVS methodology adequately reflects the diversity of work within this specialty and that it cross-links appropriately with other medical and surgical specialties.

Other studies are examining the effectiveness of capitation as a means of financing services for severely mentally ill persons and the impact of alternative organizational and systems approaches to managing resources and coordinating services. Increasing recognition that three helping systems need be involved in developing effective services for the severely mentally ill--self-help, professional, and informal caregivers such as family, friends, neighbors, and clergy--has led to Institute funding of a new National Center for Research on Self-Help Mental Health Services at the University of Michigan.

Law and Mental Health

NIMH research in the law and mental health area addresses a wide range of clinical, programmatic, and policy issues related to mentally disordered offenders and mentally ill persons believed to be "dangerous" in the criminal and civil commitment processes. Studies are focused on understanding and informing the administrative processes and service practices that govern the handling and treatment of the mentally ill in the legal system.

For example, few issues at the interface of law and mental health provoke as much debate as the insanity defense. While much attention has focused on the insanity defense trial, the focus in recent years has been shifting toward release procedures, particularly those related to persons acquitted on grounds of "not guilty by reason of insanity (NGRI)."

To clarify this important but little-studied issue, NIMH-funded researchers recently initiated a 4-year comparison of four distinct conditional release programs in Connecticut, Maine, Maryland, and New York. The study is likely to aid in determining the types of conditional release programs that most appropriately balance public protection with individual rights. After conducting a national survey of conditional release statutes, case law, and practice in all 51 U.S. jurisdictions, the researchers will compare persons in the four programs found NGRI from 1985 to 1987 and conditionally released, with persons found NGRI during the same period and not conditionally released. All individuals granted conditional releases during that period will then be followed up to determine the relative success of the four models.

National Reporting Program

NIMH operates a National Reporting Program to collect, analyze, and disseminate statistical information on the availability of mental health services and the characteristics of persons who receive care from these services. Information from this program is provided to the Congress, other Executive Agencies, the States, national mental health organizations, and researchers. Within NIMH, the information is used to understand the care provided to persons with schizophrenia; the role of mental health services in caring for special populations, such as children and youth, the elderly, and minorities; and the staffing and financing of mental health programs.

In FY 1989, a review group was convened to recommend what data should be collected in the future, how such data should be gathered, and what would be the best means for disseminating information to the field. Contracts were awarded to the Research Institute, Inc., of the National Association of State Mental Health Program Directors to investigate the feasibility of decentralizing to the States the collection of data on public mental health services, developing a State profile system for inter-State comparison, and continuing development of a pilot project to collect information on patterns of care for State mental hospitals and community programs. Funds made available under the ADAMHA ADMS Block Grant Set-Aside were used for these initiatives.

THE HOMELESS MENTALLY ILL: RESEARCH AND RESEARCH DEMONSTRATIONS

In March 1989, as an outgrowth of the National Plan for Schizophrenia Research, and to emphasize its priority in this area, NIMH established an Office of Programs for the Homeless Mentally Ill within the Office of the NIMH Director. The Office provides leadership and coordination of an expanded

Institute-wide effort to improve the care and treatment of severely mentally ill individuals who are homeless or at risk of becoming homeless.

As part of this effort, the Institute works closely with the Federal Interagency Council on the Homeless, providing expertise on the mental health aspects of homelessness. The Department of Housing and Urban Development (HUD) and the Department of Health and Human Services (HHS) are developing a memorandum of understanding to encourage closer collaboration between the two departments; FY 1990 should afford NIMH unique opportunities to affect Federal housing policy for the mentally disabled.

NIMH also administers the McKinney Community Mental Health Services Demonstration Program, coordinates an Institute-wide program of research on homelessness and mental illness, and works collaboratively with ADAMHA to administer the McKinney Mental Health Services for the Homeless (MHSH) Block Grant program. The Demonstration programs are described below; Block Grant narratives are within the Office of Treatment Improvement section of this document.

In December 1988, NIMH issued a new research announcement, "Research and Research Demonstrations on Homeless Severely Mentally Ill Adults and Homeless Families with Children Who Are at Risk of Severe Emotional Disturbance." The announcement encourages investigator-initiated epidemiological research, services research, and service systems research related to both homeless mentally ill adults and homeless families with children at risk of severe emotional disturbance. This research initiative is intended to accelerate the development of methodologically rigorous research that can contribute to more effective delivery of mental health services to homeless persons, reduce homelessness among the mentally ill, and reduce mental illness among the homeless.

Ten grant awards, totalling approximately $3.1 million, were made in late FY 1989. The 3- to 5-year projects range from a survey of attitudes toward homeless mentally ill persons to the evaluation of an assertive case management program for dually diagnosed homeless individuals. A number of the studies are long-term, examining factors that lead mentally ill individuals to become homeless and interventions that can help them become housed.

In FY 1990, NIMH is continuing to expand the cadre of investigators interested in research focused on homeless families and children at risk of mental illness, and will convene a panel of experts to outline a research agenda on the alcohol, drug, and mental disorders of homeless families and children.

RESEARCH TRAINING

The goal of the NIMH Research Training Program is to train and prepare creative and talented young scientists to apply the research tools of modern science to the issues of mental health and mental disorders, especially in critical shortage areas such as minority researchers and child and adolescent mental health. Training grants are awarded to institutions and fellowships to individuals at both the pre- and post-doctoral levels. Recipients of these awards contribute to the research in many of NIMH's centers and traditional research projects. The FY 1991 program level will approximately replace the number of scientists estimated to be retiring or leaving research careers during the year. Discussion of specific projects has been consolidated in the research narrative justification as the training program is integral to the research enterprise.

In addition, special training programs increase the number of minority students choosing careers as mental health research scientists. Recipients of NIMH research training support from either institutional or fellowship sources are obligated to pay back this support on a day for day basis (discounting the first year of support) by doing research and/or teaching after the completion of their training.

The FY 1991 budget request will fund approximately 20 more institutional training grants than were supported in FY 1990. No increases in tuition or stipends are planned.

INTRAMURAL RESEARCH

The NIMH Intramural Research Program (IRP) conducts a comprehensive research program dealing with the causes, diagnosis, treatment, and prevention of mental disorders, as well as the biological and psychosocial factors that determine human behavior and development. The intramural research program supports approximately 600 investigators and operates 22 laboratories and clinical branches on the campus of the National Institutes of Health, at the Poolesville Animal Facilities, and at the NIMH Neuroscience Center on the grounds of the District of Columbia's Saint Elizabeths Hospital. Several hundred research projects in the basic neurosciences, clinical pharmacology, clinical psychiatry, and behavioral sciences are conducted in these facilities each year. Significant accomplishments and opportunities in the NIMH intramural research program are incorporated in the research narrative justification under the appropriate headings.

The Federal Technology Transfer Act of 1986 (FTTA) promotes the practical application of research findings from federal laboratories. Federal scientists are permitted to receive royalty payments for their inventions and to enter into Cooperative Research and Development Agreements (CRADAs) with private organizations. CRADAs provide a mechanism to pool government and private intellectual, technological, and financial resources for basic, applied, and developmental research. The NIMH IRP has developed patents and a small number of CRADAs. Royalty funds of less than $10,000 annually are currently being divided between payments to inventors and costs of registering U.S. and foreign patents.

Summary of Changes

The FY 1991 budget request includes $81.9 million for the NIMH Intramural Research Program. This represents a current services level and maintains 597 FTE's, the same number as FY 1990. The budget includes an increase of $4.8 million (6 percent) over the FY 1990 level. The distribution of this increase, exclusively for built-in requirements, is displayed in the following table:

Built-in Increases	
Jan. 1990 pay annualization	+$241,000
Jan. 1991 pay increase	+900,000
Within grade increases	+426,000
Increased NIH Management Fund costs	+1,667,000
Increased FERS costs	+92,000
Increased Social Security (FICA)	+81,000
Increased cost of non-pay items including laboratory materials and other supplies	+516,000
Restoration of program cuts used to absorb Jan. 1990 pay raise	+721,000
One extra day of pay	+120,000
Total Increases	+4,764,000

RESEARCH MANAGEMENT AND SUPPORT

Funds allocated to the Research Management and Support activity support overall management, planning, policy development, and coordination of the scientific and administrative functions of the Institute. Staff provide scientific direction for program announcements, support and monitor funded research projects, manage the review and award of proposals, organize conferences and related activities to promote new initiatives, and collect and disseminate information.

In the HIV/AIDS program, this activity also supports projects providing training to health care workers related to neuropsychiatric and psychosocial aspects of HIV infection as well as counseling those undergoing HIV testing. A major effort, involving additional staff and resources, has reduced the time required to evaluate and fund HIV/AIDS research applications.

Summary of Changes

The FY 1991 budget request includes $42.6 million for Research Management and Support. Based on current estimates, this will maintain a "current services" program level and retains the FY 1990 FTE level of 403. The budget includes an increase of $2.5 million (6 percent) over the FY 1990 level.

The distribution of this increase, exclusively for built-in increases, is displayed in the following table:

Built-in Increases	
Jan. 1990 pay annualization	+$190,000
Jan. 1991 pay increase	+646,000
Within grade increases	+282,000
Increased PHS Service & Supply Fund	+79,000
Increased FTS costs	+11,000
Increased FERS costs	+60,000
Working Capital Fund transfer	+4,000
Increased Rental Payments to GSA	+127,000
Increased Social Security (FICA)	+53,000
Increased cost of non-pay items including laboratory materials and other supplies	+409,000
Restoration of program cuts used to absorb Jan. 1990 pay raise	+569,000
One extra day of pay	+78,000
Total Increases	+2,508,000

Research by Organizational Distribution

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Extramural Research:			
Schizophrenia Branch.......	$31,868,000	$37,582,000	$38,863,000
Affective & Anxiety Disorders Branch.........	35,094,000	39,148,000	40,278,000
Mental Disorders of Aging Branch.............	18,136,000	20,478,000	21,151,000
Child & Adolescent Disorders Branch.........	19,687,000	23,179,000	24,238,000
Prevention Branch..........	7,952,000	11,525,000	11,890,000
Epidemiology & Psychopathology Branch...	13,373,000	13,642,000	14,217,000
Neuroscience Branch........	55,002,000	64,261,000	67,797,000
Behavioral Sciences Branch.	26,915,000	27,576,000	28,671,000
Health & Behavior Branch...	7,865,000	8,513,000	8,828,000
Biometric & Clinical Applications Branch......	15,074,000	17,301,000	17,922,000
Antisocial & Violent Behavior Branch..........	8,177,000	8,918,000	9,302,000
Minority Resources Branch..	7,154,000	8,985,000	9,293,000
HIV/AIDS Program...........	35,898,000	55,576,000	64,974,000
Intramural Research..........	72,269,000	77,104,000	81,868,000
Research, Management & Support..................	39,229,000	40,118,000	42,626,000
Total, Research........	393,693,000	453,906,000	481,918,000

B. Demonstrations

Authorizing Legislation - Sections 301 and 520A of the Public Health Service Act and P.L. 100-628, Section 821.

	FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
CSP/CASSP.....	$24,303,000	$22,862,000	-$1,441,000
Prevention....	4,000,000	4,000,000	---
Homeless......	6,038,000	6,006,000	-32,000
Total.......	34,341,000	32,868,000	-1,473,000

1991 Authorization -	
CSP/CASSP........	Indefinite
Prevention.......	Indefinite
Homeless.........	Indefinite

Purpose and Method of Operation

NIMH supports applied research demonstrations to help determine the most effective mental health treatment, rehabilitation, and support services for individuals with severe and persistent mental illness. Special emphasis is placed on those individuals who are homeless or at risk of becoming homeless, and children and adolescents with severe emotional disturbance. The demonstration and dissemination activities of the programs provide a Federal impetus, along with new strategies and methods, to States and communities to establish and refine publicly supported programs. Beginning in FY 1989, NIMH has significantly increased the research and evaluation components of its demonstration projects, to ensure that they will generate knowledge about which approaches are in fact effective and appropriate to specific populations. Services research demonstrations conducted with control and comparison groups focus on such topics as the prevention of persistent mental illness, case management strategies, community crisis responses, and psychosocial rehabilitation strategies. Like clinical trials, these demonstrations include provision of services to high priority population groups.

Funding levels for the past five fiscal years were as follows:

1986....................................	$11,962,000
1987....................................	$33,500,000
1988....................................	$19,148,000
1989....................................	$30,514,000
1990....................................	$34,341,000

Community Support Program

The Community Support Program (CSP) is a national effort to promote the development of effective, comprehensive, community-based systems of care for adults with severe and persistent mental illness. The Program focuses on those who are inappropriately institutionalized in hospitals and nursing homes, and the larger number living outside the hospital without adequate housing, mental health, and life-support services. Community Services Demonstration Projects increase the knowledge base on effective treatment approaches for that target population. State Service System Improvement Projects encourage States and communities to give greater priority to the needs of the population, particularly those who are homeless or living in unstable housing situations, and to mobilize the necessary administrative and programmatic changes needed to improve community-based services and opportunities for the population.

CSP has stimulated the development of new and improved services and community-based supports throughout the Nation. In FY 1989 and FY 1990, NIMH has been focusing its research demonstration projects on ways to improve case management, community crisis response, psychosocial and vocational rehabilitation, and enhancement of the involvement of primary consumers and family members in the planning, provision, and assessment of mental health and supportive services.

Self-help groups are relatively new to the mental health field, although they have long been known to be useful in other disorders, like alcoholism. Recognizing the potential significance of self-help in the recovery process, the cost-effectiveness of the approach, and the success of self-help in related fields such as substance abuse, the Community Support Program began five years ago to support various technical assistance initiatives to promote these approaches. The initiatives culminated in 1988 in the funding of 14 demonstration projects, run by and for mentally ill individuals, the first such projects to be supported by a Federal agency. These 3-year demonstrations are implementing and evaluating a range of self-help services including peer supports for individuals discharged from mental hospitals, crisis assistance, job training, assistance in obtaining housing, and drop-in centers for socialization. The information generated from these projects will significantly add to the knowledge base about the unique characteristics of and effective approaches for self-help for mentally ill individuals.

In FY 1991, the program anticipates supporting demonstration projects for (1) services programs meeting the special needs of the elderly severely mentally ill population (the fastest growing population group afflicted with mental disorders), (2) difficult-to-treat-young adults in unstable living situations, and (3) cost-effective approaches that incorporate the use of the currently existing supports in the community. All CSP demonstrations focus on services that are sensitive to and relevant for minority groups and other special populations, including those with co-occurring mental illness and substance abuse problems.

Child and Adolescent Service System Program

The Child and Adolescent Service System Program (CASSP) is designed to improve systems for service delivery for severely emotionally disturbed children and adolescents, the primary goal of which is to improve and integrate the way diverse services are delivered to this population by States and communities. CASSP encourages the interagency coordination and planning of services as well as the development of a stronger mental health component within the broader child serving system. CASSP, through its Research and Training Centers and its Technical Assistance Center, pulls together the best research in the areas of concern and makes it available to service system administrators. Through State and community grant programs, CASSP then ensures that this research is utilized in the development of State-wide service system improvement strategies, and is included in the planning and development of new services and programs. CASSP requires that newly developed strategies and services be appropriate for the needs of minority children and youth, and that these populations participate in all aspects of service system development. In addition, families of severely emotionally disturbed children and adolescents are included in the planning and implementation of service systems.

Currently in its sixth year, CASSP is or has been active in 47 States, 1 territory and the District of Columbia. It also co-funds 2 Research and Training Centers with the Department of Education's National Institute of Disability and Rehabilitation Research and co-funds a Technical Assistance Center with the Division of Maternal and Child Health, HRSA. The FY 1991 emphasis will be on the extending the State-level CASSP effort down to the community-level, and the development of research demonstrations on the components of the system of care necessary in communities.

Homeless children and children in homeless families are a special focus within CASSP grants. All new grants will have homeless objectives and old grants will be encouraged to include them in their upcoming plans. These homeless initiatives will build on the knowledge base being developed by this and other NIMH programs.

Prevention Services Research Demonstrations

NIMH is expanding its prevention services research demonstration activities through a new request for applications, as well as through CSP and CASSP activities. The new RFA will focus primarily on the prevention of youth suicide, on conduct and other antisocial disorders, and on innovative interventions very early in life, including infancy.

Community Mental Health Services Demonstration Projects for Homeless Individuals Who Are Chronically Mentally Ill

Section 612 of the Stewart B. McKinney Homeless Assistance Act (P.L. 100-628) authorized the "Community Mental Health Services Demonstration Projects for Homeless Individuals Who Are Chronically Mentally Ill." Under this authority, in May 1988, NIMH awarded 9 projects for homeless mentally ill adults and 3 projects for homeless children and adolescents. These projects were initially funded for two years; eight of the projects were competitively renewed for a third year of funding. In addition to the local projects, national evaluation and technical assistance efforts are integral to the program. NIMH administers these demonstrations in the Office of Programs for the Homeless Mentally Ill, which coordinates the demonstrations with the homeless research program discussed previously.

The national evaluation will yield cross-site, uniform data on both the implementation and effectiveness of the demonstration projects. The information from this effort will include data on the populations served, the nature of the specific services and service systems implemented, the client- and system-level outcomes of the projects, and the conditions that both thwart and facilitate project success. The national evaluation is coordinated with the process and outcome evaluation efforts of the individual projects.

Rationale for the Budget Request

In FY 1991, $26.9 million is requested for both the adult and child demonstration programs, including $4.0 million to continue funding of 20 prevention services research demonstration projects. These demonstration programs will add valuable knowledge in their respective areas, which will be made available throughout the Nation to assist in the care of persons who are seriously mentally disabled.

The $6.0 million appropriated in FY 1990 will support 24 new research demonstration projects for the homeless mentally ill population. Discussions are underway between the Department of Housing and Urban Development (HUD) and the Department of Health and Human Services (HHS) to design a new research demonstration initiative linking housing and support services. National technical assistance and evaluation activities will continue to support both FY 1989 and FY 1990 McKinney demonstration efforts.

The FY 1991 budget request of $6.0 million will continue support for the projects active in FY 1990.

The following table provides numbers of awards and funding levels, displayed by type of award:

DEMONSTRATIONS

	FY 1989 Actual		FY 1990 Estimate		FY 1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount
CSP/CASSP:						
Grants:						
Adult:						
Continuations...	87	$10,343,000	60	$9,981,000	74	$12,572,000
Competing.......	---	---	---	---	---	---
New............	29	5,562,000	46	6,521,000	17	2,168,000
Supplemental....	(8)	137,000	---	---	---	---
Subtotal.......	116	16,042,000	106	16,502,000	91	14,740,000
Children:						
Continuations...	29	3,772,000	32	3,870,000	40	6,250,000
Competing.......	7	1,255,000	9	1,002,000	10	1,150,000
New............	18	2,183,000	20	3,821,000	9	1,614,000
Supplemental....	(5)	153,000	---	---	---	---
Subtotal.......	54	7,363,000	61	8,693,000	59	9,014,000
Contracts:						
Renewals.........	7	2,215,000	4	2,368,000	4	2,315,000
New..............	1	300,000	3	740,000	3	793,000
Subtotal.......	8	2,515,000	7	3,108,000	7	3,108,000
Total, CSP/CASSP...	178	25,920,000	174	28,303,000	157	26,862,000
(Homeless Related)	(178)	(25,920,000)	(154)	(24,303,000)	(137)	(22,862,000)
McKinney Homeless:						
Grants:						
Continuations.....	1	118,000	---	---	24	5,433,000
Competing.........	8	4,022,000	24	5,465,000	---	---
Subtotal........	9	4,140,000	24	5,465,000	24	5,433,000
Contracts:						
Renewals..........	1	435,000	1	147,000	1	487,000
New...............	1	19,000	1	426,000	1	86,000
Subtotal........	2	454,000	2	573,000	2	573,000
Total, McKinney Homeless..........	11	4,594,000	26	6,038,000	26	6,006,000
TOTAL......	189	30,514,000	200	34,341,000	183	32,868,000
(Homeless Related)	(189)	(30,514,000)	(180)	(30,341,000)	(163)	(28,868,000)

C. Protection and Advocacy

Authorizing Legislation - P.L. 100-509.

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$14,001,000	$8,000,000	-$6,001,000

Authorization......................... Indefinite

Purpose and Method of Operation

The goal of the Protection and Advocacy Program (P&A) is to formalize and strengthen State programs that ensure that the rights of mentally ill individuals are protected while they are inpatients or residents in facilities rendering care and treatment, and for 90 days following their discharge. There are 56 Protection and Advocacy Systems. Of these, 46 are private, not-for-profit organizations and the remaining 10 are State agencies that are independent of the State mental health services delivery systems.

Funding levels for the past five fiscal years were as follows:

1986	$ 9,570,000
1987	$10,500,000
1988	$10,555,000
1989	$12,844,000
1990	$14,001,000

The most recent program data reveal that in FY 1988 a total of 23,300 case problems were handled for 15,042 individual clients. The majority of clients (81 percent) were between 21-64 years old. A little more than two-thirds of all clients were living in public mental hospitals at the time they contacted the P&A agency.

Allegations of abuse were present in 23 percent of the complaints investigated. The most frequent complaints concerned inappropriate or excessive medication and physical assault. Three hundred sixty three deaths were reported and investigated. The majority of these cases were handled by the New York State P&A system which is vested by the State with responsibility to investigate all instances of deaths occurring in residential mental health facilities. Allegations of neglect were included in 45 percent of the total number of complaints handled. The most frequent charges were failure to provide appropriate admission to a residential facility, failure to provide appropriate medical/mental health treatment, and failure to provide discharge planning. Rights protection issues were present in 38 percent of the total complaints handled. The most frequent complaints concerned finances and reimbursements, legal representation and housing.

A total of 18,407 information and referral services were provided by P&A agencies, and an estimated 96,559 people benefitted from public education and/or constituency training activities including training on patients' rights for staff of residential facilities, presentations on P&A and patients' rights to residents of mental health facilities, ex-patient/consumer groups, and family members, and public education outreach to address issues such as discrimination and stigma.

P&A systems in 25 States were involved in class action litigation to benefit an estimated 278,361 clients. Forty-five systems reported involvement in legislative advocacy (e.g., reviewing, commenting and testifying on proposed State legislation), most frequently concerning involuntary commitment procedures. Fifty-four systems were active in systemic advocacy (e.g., negotiations to revise Departmental and hospital policies), particularly on obtaining least restrictive therapeutic settings, protecting patient rights in proposed transfers, and ensuring P&A access to client records.

Priority areas for FY 1990 and FY 1991 include increasing outreach and services to Blacks and Hispanics and developing new strategies to respond to advocacy needs for children.

The allotments to States and territories enable existing Protection and Advocacy Systems to establish program components to protect and advocate the rights of mentally ill individuals in conformance with Constitutional, Federal, and State mandates and to investigate reported or suspected incidents of abuse and neglect of mentally ill individuals. Appropriated funds are used to meet the costs of planning, developing, implementing, and expanding activities to meet these goals and to provide technical assistance to the States and territories.

Allocation of Funds by State

Distribution of funds by State and territory are set forth in the following table. These distributions are based upon a formula that considers both population and relative per capita income, and provides a minimum amount to each State ($125,000) or territory ($67,000). Assurances must be received from State Governors that these funds will be used to supplement and not to replace existing non-Federally supported resources or programs for the protection and advocacy of mentally ill individuals.

PROTECTION AND ADVOCACY DISTRIBUTION

State/Territory	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Total	$12,844,000	$14,001,000	$ 8,000,000
Alabama..................	185,172	199,586	125,000
Alaska...................	152,000	165,680	125,000
Arizona..................	152,000	165,680	125,000
Arkansas.................	152,000	165,680	125,000
California...............	1,025,975	1,135,199	469,591
Colorado.................	152,000	165,680	125,000
Connecticut..............	152,000	165,680	125,000
Delaware.................	152,000	165,680	125,000
District of Columbia......	152,000	165,680	125,000
Florida..................	475,680	525,528	217,392
Georgia..................	257,325	281,404	125,000
Hawaii...................	152,000	165,680	125,000
Idaho....................	152,000	165,680	125,000
Illinois.................	446,052	482,244	199,487
Indiana..................	231,407	249,721	125,000
Iowa.....................	152,000	165,680	125,000
Kansas...................	152,000	165,680	125,000
Kentucky.................	168,578	181,774	125,000
Louisiana................	202,121	218,458	125,000
Maine....................	152,000	165,680	125,000
Maryland.................	167,585	183,214	125,000
Massachusetts............	212,606	228,178	125,000
Michigan.................	363,666	393,060	162,595
Minnesota................	166,275	182,506	125,000
Mississippi..............	152,000	165,680	125,000
Missouri.................	207,152	225,882	125,000
Montana..................	152,000	165,680	125,000
Nebraska.................	152,000	165,680	125,000
Nevada...................	152,000	165,680	125,000
New Hampshire............	152,000	165,680	125,000
New Jersey...............	270,595	291,770	125,000
New Mexico...............	152,000	165,680	125,000
New York.................	661,207	713,866	295,301
North Carolina...........	275,955	298,999	125,000
North Dakota.............	152,000	165,680	125,000
Ohio.....................	438,823	477,338	197,458
Oklahoma.................	152,000	165,680	125,000
Oregon...................	152,000	165,680	125,000
Pennsylvania.............	477,907	523,174	216,418
Rhode Island.............	152,000	165,680	125,000
South Carolina...........	155,114	168,595	125,000
South Dakota.............	152,000	165,680	125,000
Tennessee................	212,810	229,214	125,000

PROTECTION AND ADVOCACY DISTRIBUTION - continued

State/Territory	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Total	$12,844,000	$14,001,000	$ 8,000,000
Texas	690,413	758,487	313,759
Utah	152,000	165,680	125,000
Vermont	152,000	165,680	125,000
Virginia	227,983	249,162	125,000
Washington	178,760	197,772	125,000
West Virginia	152,000	165,680	125,000
Wisconsin	195,253	213,086	125,000
Wyoming	152,000	165,680	125,000
American Samoa	81,472	88,804	67,000
Guam	81,472	88,804	67,000
Northern Mariana Islands	81,472	88,804	67,000
Puerto Rico	262,816	284,186	125,000
Virgin Islands	81,472	88,804	67,000
Subtotal (N=56)	12,587,118	13,720,979	7,840,001
Technical assistance	256,882	280,021	159,999
Total	$12,844,000	$14,001,000	$ 8,000,000

Rationale for the Budget Request

The Protection and Advocacy Program budget request represents the second year of a planned 3-year phaseover to State responsibility. Reducing the funding in FY 1991 and ending it after FY 1992 will permit transition to State and other sources of funding. The request is for $8,000,000 in FY 1991, a decrease of $6,001,000 from the FY 1990 level of $14,001,000.

D. Clinical Training

Authorizing Legislation - Section 303 of the Public Health Service Act.

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$13,534,000	$5,000,000	-$8,534,000

1991 Authorization.................... Indefinite

Purpose and Method of Operation

Begun in 1948 with the Institute's inception, the NIMH mental health clinical training program has had as goals: achieving an adequate, balanced, and properly distributed supply of mental health service providers; and matching training activities with identified national needs and priorities. The program awards grants to educate individuals for careers in public mental health services, and to develop Human Resource Development programs in State mental health systems. Clinical training awards are made to public or nonprofit private institutions to train personnel to deliver services to specifically designated underserved area and priority populations, including seriously mentally ill adults, children and adolescents, the elderly, and racial/ethnic minorities.

Funding levels for the past five fiscal years were as follows:

1986	$19,140,000
1987	$15,000,000
1988	$16,755,000
1989	$12,844,000
1990	$13,534,000

The Individual Faculty Scholars program was established in 1988 to give a major multiplier effect to clinical training funds. In 1989, 27 awards were made to promising young individual faculty members from social work, psychiatry, psychology, and psychiatric nursing. By supporting faculty scholars who are well-grounded and experienced in modern mental health diagnostic and treatment techniques, the program will serve to strengthen the scope and quality of the preparation of future direct care providers of mental health services in the priority populations.

Institutional clinical training grants are of two types: General Professional Training Grants and Racial/Ethnic Minority and Disadvantaged Students Grants. The "core" mental health service professions: psychiatric nursing, psychiatry, psychology, social work, and marriage and family therapy are acknowledged to lack sufficient numbers of professionals prepared for practice with the priority populations. There is an especially acute shortage of racial/ethnic minority professionals trained in the core disciplines. Approximately 400 trainees received FY 1990 stipend support (with payback obligations) in the following priority populations: seriously mentally ill adults, 35 percent; children and adolescents, 47 percent; and elderly, 18 percent.

The concept of the payback for NIMH training support received was introduced in 1981. Trainees supported for more the 180 days are required to work in the public sector for as many months as they receive support. Since the introduction of payback, approximately 6,000 NIMH clinical trainees have completed their training, and over 4,000 have completed their payback service. The present payback system appears to be a cost-effective method for educating mental health professionals and stimulating their interest and participation in meeting the needs of traditionally underserved populations.

The State Human Resource Development Program was initiated at NIMH in 1978. The Program awards grants to individual State departments of mental health and multi-State organizations designated by three or more States to develop and disseminate knowledge and technology on human resource development issues and problems. Grant awards are made to improve States' capacity to identify human resource issues such as the availability, distribution, competence and utilization of the mental health work force. In FY 1989, the program made 13 new awards, 5 of which are multi-State.

The following tables provide FY 1989-1991 estimates for the clinical training program:

Clinical Training by Type of Award

	FY 1989 Actual		FY 1990 Estimate		FY 1991 Estimate	
Mechanism & Type:	No.	Amount	No.	Amount	No.	Amount
Grants:						
Continuations...	30	2,970,000	65	4,634,000	42	2,463,000
Competing.......	1	297,000	---	---	---	---
New.............	41	2,839,000	21	1,467,000	---	---
Supplemental....	(1)	13,000	---	---	---	---
Subtotal..........	72	6,119,000	86	6,101,000	42	2,463,000
Faculty Scholars:						
Continuations...	13	1,014,000	26	1,986,000	9	721,000
Competing.......	---	---	---	---	---	---
New.............	14	1,112,000	15	1,182,000	---	---
Supplemental....	(1)	1,000	---	---	---	---
Subtotal..........	27	2,127,000	41	3,168,000	9	721,000
State Human Resource Development:						
Continuations...	15	1,734,000	20	1,919,000	12	1,313,000
Competing.......	---	---	---	---	---	---
New.............	13	1,403,000	9	1,318,000	---	---
Supplemental....	---	---	---	---	---	---
Subtotal........	28	3,137,000	29	3,237,000	12	1,313,000
Contract & Interagency Agreements:						
Renewals........	6	1,155,000	1	322,000	1	250,000
New.............	2	306,000	1	706,000	1	253,000
Subtotal..........	8	1,461,000	2	1,028,000	2	503,000
Total Clinical Training..........	135	12,844,000	158	13,534,000	65	5,000,000

Clinical Training by Program Distribution

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
General Clinical Training....	$ 2,655,000	$ 3,208,000	$ 2,132,000
Minority Mental Health.......	2,678,000	2,275,000	230,000
Depression (D/ART)...........	943,000	848,000	211,000
Faculty Scholars.............	2,127,000	3,168,000	721,000
State Human Resource Development................	3,137,000	3,237,000	1,313,000
Service Payback Activities...	307,000	322,000	250,000
Joint NIAAA/NIDA Training....	754,000	---	---
Project Review Activities....	147,000	162,000	---
Other Programs...............	96,000	314,000	143,000
Total, Clinical Training...	$12,844,000	$13,534,000	$5,000,000

Rationale for the Budget Request

The FY 1991 budget request of $5,000,000 is a decrease of $8,534,000 from the FY 1990 level of $13,534,000. This proposal reflects the intent to phaseover the funding of mental health clinical training to non-Federal sources. Current plans call for the elimination of Federal funding after FY 1992.

II. Drug Abuse

Budget Authority by Mechanism

	1989 Actual		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount
Research Project Grants:						
Continuations...........	366	69,886,000	448	92,222,000	551	120,119,000
Admin. Supplements......	(17)	834,000	(3)	83,000	(8)	88,000
New/Competing Combined..	234	42,017,000	278	56,614,000	245	52,064,000
Subtotal, RPG.........	600	112,737,000	726	148,919,000	796	172,271,000
Trmt Outcome Res (non-add)	(5)	(1,141,000)	(11)	(3,902,000)	(12)	(4,248,000)
Research Centers..........	18	12,398,000	23	15,701,000	24	16,810,000
Other Research:						
Research Career Programs.	39	2,316,000	53	3,253,000	63	3,992,000
Cooperative Agreements...	4	766,000	4	928,000	4	1,052,000
Instrumentation Grants...	20	518,000	20	550,000	19	504,000
Small Grants.............	8	269,000	---	---	---	---
Subt., Other Research...	71	3,869,000	77	4,731,000	86	5,548,000
Total, Research Grants	689	129,004,000	826	169,351,000	906	194,629,000
Research Training:	FTTP		FTTP		FTTP	
Individual Awards........	34	643,000	29	800,000	44	1,190,000
Institutional Awards.....	80	1,728,000	126	3,126,000	154	3,760,000
Total, Res Training...	114	2,371,000	155	3,926,000	198	4,950,000
	No.		No.		No.	
Res. and Dev. Contracts...	59	24,555,000	77	29,846,000	80	40,108,000
Subtotal, Extram. Res...		155,930,000		203,123,000		239,687,000
	FTE		FTE		FTE	
Intramural Research.......	97	15,224,000	101	21,397,000	113	24,115,000
Res. Mgmt. & Support......	227	19,414,000	296	27,062,000	354	33,338,000
Total, Research.........	324	190,568,000	397	251,582,000	467	297,140,000
	No.		No.		No.	
Drug Abuse Demonstrations.	94	97,885,000	148	128,152,000	126	109,934,000
Total, NIDA........		288,453,000		379,734,000		407,074,000
(HIV/AIDS non-add)		(118,833,000)		(138,082,000)		(139,821,000)
FTE............		324		397		467
(HIV/AIDS FTE)		(39)		(63)		(85)

OVERVIEW

The National Institute on Drug Abuse (NIDA) is the primary source of support in the United States for research on the treatment and prevention of drug abuse. NIDA's intramural and extramural research programs support basic, clinical, applied, and epidemiological studies of drug abuse. NIDA's research demonstration programs generate information on promising new prevention and treatment programs. NIDA also supports the training of new researchers for careers in drug abuse research and the career development of established researchers in both basic and clinical research related to drug abuse.

While the Nation has made progress in reducing the overall number of people who abuse drugs, drug abuse remains widespread, and the adverse health consequences connected to substance abuse are increasing. In hospital emergency rooms that reported to the Drug Abuse Warning Network (DAWN), the number of people admitted to emergency rooms following cocaine abuse increased by over 400 percent between 1984 and 1988. Much of this increase involved the smoking of cocaine, primarily crack cocaine. The number of cocaine smoking cases increased by 2600 percent between 1984 and 1988; the number of people who died following cocaine abuse more than tripled during the same period.

More than one-third of all emergency room episodes in 1988 involved cocaine, making it the single drug most frequently involved in emergency-related reports to DAWN. While most of these episodes involved men, the frequency of episodes involving women is significant. Women were involved in 33 percent of all cocaine episodes. Women also accounted for 30 percent of heroin episodes, and 25 percent of all PCP episodes. People aged 20-29 years made up 38 percent of the emergency room episodes, while those aged 30-39 years made up 32 percent. Nine percent of the emergency room episodes involved persons 6-17 years of age.

Drug-related crime cost American society approximately $20 billion in 1983. The criminal activities of each daily heroin user cost society approximately $55,000 per year. The typical narcotic addict commits an average of 178 criminal offenses per year. If this statistic is generalized to an estimated 450,000 active heroin addicts living in the U.S., it can be estimated that narcotic addicts commit over 80 million crimes every year. Youth are a significant part of this problem. Results from interviews conducted with serious juvenile delinquents in Miami, Florida, indicated that youth involved in the use and sale of crack cocaine committed an average of 880 criminal offenses in the previous year.

Drug abuse among pregnant women has been a major concern since the first results were reported of pregnant women who had abused opiates during pregnancy. In one recent study, about 6 million women of child-bearing age in the U.S. were estimated to have used an illicit drug at least once. Another study has estimated that about 375,000 infants may be affected each year from *in utero* exposure to drugs. A recent study reported a 15 percent incidence of Sudden Infant Death Syndrome (SIDS) in infants exposed to cocaine *in utero*. The problem of maternal drug abuse has received much more attention in recent years following the definition of the Fetal Alcohol Syndrome and the reports of cocaine and marijuana use by pregnant women. The obstetric and neonatal consequences have ranged from seizures and strokes to urogenital birth defects in infants exposed to cocaine. Perhaps even more troubling, these effects have long-term implications with regard to an infant's growth, maturation, and mental, cognitive, and emotional development.

Intravenous drug abuse is a major factor in the perinatal transmission of Human Immunodeficiency Virus (HIV) infection. Approximately 80 percent of all infants with perinatally acquired HIV infections have a mother who is a intravenous (IV) drug user or who has sexual partners who are IV drug users. Perinatal HIV infection is already the ninth leading cause of death among children 1 to 4 years of age. If current trends continue, AIDS could well be among the top five causes of death for children 1 to 4 years of age in the next three to four years.

Drug use is most prevalent in adults aged 18 through 34 years, who comprise a major segment of our workforce. Nearly 17 percent of full-time employed 18-25 year-olds, and 11 percent of 26 to 34 year-olds, have used marijuana in the past month. The direct and indirect costs of drug abuse to business include decreased productivity, absenteeism, accidents at the workplace, health care, loss of trained personnel, theft, and the costs associated with prevention, treatment, and deterrence programs.

Priorities for FY 1991

NIDA's research priorities for FY 1991 reflect a recognition of these problems and a long-term commitment to finding solutions for them in the form of new and improved prevention and treatment strategies. No "magic bullet" will cure drug abuse. Stable support for research ranging from basic studies of how drugs affect the central nervous system to large scale clinical trials for new treatment medications is necessary. NIDA's FY 1991 budget continues to place priority on four areas identified over the past few years as of prime importance: HIV/AIDS, improving drug abuse treatment, maternal drug abuse and its effect on children, and prevention.

HIV/AIDS remains the highest priority of the Public Health Service. While progress has been made in reducing the spread of HIV/AIDS in homosexual males, the same cannot be said about intravenous drug abusers. Furthermore, IV drug abusers remain the most likely source of HIV infection in infants and in the heterosexual population. NIDA's plans for HIV/AIDS research in FY 1991 are described in ADAMHA's HIV/AIDS budget submission.

Improving drug abuse treatment is NIDA's highest priority. With funds provided by the anti-drug abuse acts of 1986 and 1988, NIDA has expanded research to improve drug abuse treatment. This expansion has included research on non-pharmacological aspects of treatment and the development of new medications for drug abuse treatment. In FY 1990, NIDA will establish a new division to coordinate all of its medications development program activities, which will be further expanded in FY 1991.

The increasing use of crack cocaine by women and the increase in infants born to mothers who are IV drug abusers or who are the sexual partners of IV drug abusers is a matter of tremendous national concern. During the past several years, NIDA has greatly expanded its research in this area and it will continue to receive special attention in FY 1991.

Because we believe it is clearly more desirable to prevent drug abuse than to treat it and its effects later, NIDA is expanding its prevention research programs. This research includes basic studies of possible genetic factors that might make some individuals more vulnerable to drug abuse and large scale evaluations of school and community-based prevention programs that appear to be effective.

A. Research

Authorizing Legislation - Sections 301, 487, 501, and 517 of the Public Health Service Act.

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$251,582,000	$297,140,000	+$45,558,000

1991 Authorization.................... Indefinite

Purpose and Method of Operation

The National Institute on Drug Abuse (NIDA) is the lead Federal agency and predominant source of funding in support of research on drug abuse. Research is supported extramurally through grants and contracts and intramurally at the Addiction Research Center in Baltimore, Maryland. Training at the pre- and post-doctoral levels is provided through institutional grants to universities and individual fellowships.

Funding levels for the past five fiscal years were as follows:

1986	$ 85,526,000
1987	$138,733,000
1988	$147,025,000
1989	$190,568,000
1990	$251,582,000

Research by Function

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Extramural Research:			
Basic Biomedical	$52,610,000	$62,000,000	$70,000,000
Neuro-Behavioral	33,677,000	39,500,000	46,500,000
Prevention	23,928,000	36,000,000	42,500,000
Treatment	35,020,000	50,500,000	61,000,000
Epidemiology	10,695,000	15,123,000	19,687,000
Subtotal	155,930,000	203,123,000	239,687,000
Intramural Research	15,224,000	21,397,000	24,115,000
Research Management & Support	19,414,000	27,062,000	33,338,000
Total, Research	190,568,000	251,582,000	297,140,000

Research by Drug

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Extramural Research:			
Narcotics	$33,964,000	$50,000,000	$61,000,000
Marijuana	8,419,000	10,000,000	11,500,000
Stimulants & Cocaine	31,497,000	44,000,000	53,000,000
Sedatives	4,198,000	4,800,000	5,400,000
Hallucinogens	4,606,000	5,500,000	6,000,000
Nicotine	6,631,000	7,650,000	8,200,000
Inhalants	589,000	1,000,000	1,500,000
Endogenous	10,466,000	12,550,000	14,100,000
Multiple/Nonspecific	55,560,000	67,623,000	78,987,000
Subtotal	155,930,000	203,123,000	239,687,000
Intramural Research	15,224,000	21,397,000	24,115,000
Research Management & Support	19,414,000	27,062,000	33,338,000
Total, Research	190,568,000	251,582,000	297,140,000

Rationale for the Budget Request

The FY 1991 budget request includes $297.1 million for NIDA research activities, an increase of $45.6 million or 18 percent over the FY 1990 estimate. The request includes $220.7 million for NIDA's regular research program, and increase of $25.6 million or 13 percent over the FY 1990 level, and $76.5 million for HIV/AIDS research, an increase of $19.9 million, or 35 percent, over the FY 1990 estimate.

The request will support 245 new and competing project grants, a decrease of 33, or 12 percent from the FY 1990 level. Of these, 182 are for regular drug abuse research and 63 are for HIV/AIDS research. The request will also support one new center focusing on prevention research among high risk youth; 10 new research career awards which emphasis on recruiting clinicians into drug abuse research; and 10 new contracts for expanded medications development and data collection activities. The request will support a major expansion of NIDA's training program, increasing the number of trainees by 43 from the FY 1990 level of 155 to 198. NIDA's intramural program will increase by $2.7 million, or 13 percent, from the FY 1990 level. This increase will be used to expand treatment and medications development research at the Addiction Research Center.

The request includes $33.3 million for the research management and support line, an increase of $6.3 million, or 23 percent, over the FY 1990 level. These funds will be used to support: built in increases, 10 additional FTEs associated with the HIV/AIDS program, 48 additional FTEs associated with the regular drug abuse program, and funds to provide additional support for data collection programs. It should be noted as well that the FY 1990 estimate for RMS reflects a transfer of $1.5 million from the intramural program to RMS to support a reorganization of the Institute's services research program and a reprogramming of $2.2 million from regular research contracts to RMS to provide additional support for the Institute's research and data collection programs.

Overall, the FY 1991 request provides a 30 percent increase in epidemiological research with special emphasis on hard to reach populations such as school drop-outs, a 21 percent increase in treatment research with special emphasis on the development of new medications for the treatment of drug abuse, an 18 percent increase in prevention research with special emphasis on programs targeted toward high-risk youth, an 18 percent increase in neuro-behavioral research which includes research on the effects of maternal drug abuse on infant development, and a 13 percent increase in basic biomedical research. Research on cocaine will increase by approximately 20 percent.

BASIC BIOMEDICAL RESEARCH

NIDA's basic biomedical research program encompasses a wide range of research designed to identify the mechanisms of actions of abused drugs, to reveal the consequences of acute and chronic drug abuse, and to develop information needed to devise new treatments for the various aspects of addiction.

Opiate Receptors

Because of the dramatic increase in narcotic addiction in the 1960s and 1970s, NIDA focused research on the mechanism of action of opiates to better understand how opiates affect the brain. This research has resulted in discoveries that are important not only to understanding narcotic addiction, but also to understanding how the brain itself works.

NIDA researchers have developed mixed agonist/antagonist types of opiates that can produce marked analgesia but with less addictive potential than pure agonists such as morphine. A number of such analgesics are already on the market, including pentazocine, nalbuphine, and butorphanol. Another, buprenorphine, is under investigation as a possible treatment for both heroin and cocaine addiction. Further NIDA-supported scientists have synthesized peptides which are now available for experimental purposes that produce analgesia without causing addiction. Other drugs have shown promise of being useful for treating pregnant women without crossing the placental barrier and affecting the developing fetus. Further research on these peptides will be initiated in FY 1991.

The opiate narcotics, along with barbiturates and alcohol, are well known for their ability to induce tolerance and physical dependence, one hallmark of addiction. In the drug dependent individual, the nervous system has adapted to the continued use of drugs so that it functions properly only when the drug is present. As a result, drug use avoids the painful consequences of drug abstinence. The changes in pre- and postsynaptic receptor function that occur during drug dependence and withdrawal are now being carefully examined to develop interventions that might 'reset' the nervous system to a normal state, and terminate drug dependence without a severe withdrawal syndrome.

Experimental work with pure opiate antagonists, drugs such as naloxone and naltrexone, that block the effects of opiates, has resulted in some unexpected and dramatic findings that may have clinical applications in a startling array of conditions not directly related to addiction. Hemorrhagic, septic and spinal shock, appetitive behavior, memory and some kinds of learning, and psychosis are all altered by opioids. Such knowledge carries the possibility of important therapeutic applications. The most striking finding, however, is that opiate antagonists can be used to treat some infants at risk for Sudden Infant Death Syndrome. Recent work by NIDA grantees has shown that the use of opiate antagonists usually used in the treatment of narcotic addicts can prevent SID in some children.

Although researchers have searched for many years for the enzymes involved in opiate peptide processing, they have had little success until recently. Now several processing enzymes have been isolated, and some of their genes and precursor genes have been cloned at the molecular level. Some of these enzymes are involved only in synthesis, others only in the degradation, while the rest are involved in both processes. Understanding how the synthesis and degradation of opioids are controlled may give insight into why some people are more at risk of opiate addiction than others. It may also provide us tools to treat addiction. An experimental drug is now available that can block the breakdown of endogenous opioids. This compound may represent a new nonaddictive class of drugs with which to treat addiction by keeping levels of endogenous opioids high enough to prevent withdrawal symptoms.

A major route by which transmitters (like the opioids) and drugs produce their characteristic effects is through so-called second messenger systems. Second messengers are chemical intermediaries that amplify, within the cell, the message that is sent by the interaction of the transmitter or drug with the receptor. Opiate receptors are known to regulate the amount of cyclic-AMP (cAMP), an important second messenger system found in many brain regions. One of the major problems in studying the interaction of opiate receptors with the cAMP system is that even the "amplified" signal it produces is difficult to detect. A recent methodological breakthrough has made the study of cAMP systems easier to accomplish. In FY 1991, studies of second messenger systems will continue, with the aim of producing medications to treat addictions.

Recently, several laboratories have purified preparations of opioid receptors, a crucial step in determining their molecular structure. One team of investigators has purified an opioid binding protein that is selective for alkaloid ligands. A unique feature of this protein is that it requires acidic lipids containing unsaturated fatty acids, or the fatty acids themselves, to exhibit opioid binding activity. Because lipids like these are typically found in cell membranes, this finding suggests that the receptor molecule only takes its active configuration after it is inserted into the cell membrane. Knowing the actual configuration of the receptor molecule permits more focused drug design efforts and increases the likelihood that medications can be produced to alter the activity in opioid systems.

Cocaine Receptor

NIDA has initiated a major effort to find a cocaine antagonist. A significant breakthrough in this effort to understand the addictive properties of cocaine occurred 2 years ago when scientists working at NIDA's Addiction Research Center identified the molecule in the brain most likely to be responsible for mediating the rewarding properties of cocaine. This molecule is found on a pumping mechanism that is used by nerve cells to inactivate the dopamine that is released during the normal course of neuronal communication. One group of dopamine-containing neurons mediates the subjective feelings of pleasure.

Because the consumption of cocaine blocks the inactivation, or reuptake, of dopamine, normal feelings of pleasure are intensified.

When nerve cells communicate, the terminals of one neuron release a chemical, called a neurotransmitter, which diffuses across a small space, called a synapse, and then attaches itself to a molecule located on another neuron. In order to terminate the communication process, the neurotransmitter must somehow be removed from the synapse so that it can no longer combine with the receptor. One way neurons do this is by pumping the transmitter back into the neuron that released it, a process called reuptake. Cocaine blocks the reuptake process in certain kinds of neurons, including those that contain dopamine. One group of dopamine-containing neurons mediates the subjective feelings of pleasure. Because the consumption of cocaine blocks the reuptake of dopamine, feelings of pleasure, which are normally either not very strong or long lasting, are intensified.

Identification of this cocaine receptor was crucial in the search for an antagonist because it identified the molecular target at which the antagonist must be directed. Since its identification, an intense search has been started to find medications that will prevent the binding of cocaine to the dopamine reuptake site without altering the normal operation of the pump. A number of approaches are being tried.

In one approach, scientists are looking at compounds that appear to bind to the dopamine pump and which might block the binding of cocaine. In order for such a compound to be effective, it must bind tightly enough so that cocaine cannot displace it. At the same time, it must have little effect on how the pump works so that it does not increase the amount of dopamine in the synapse as cocaine does.

In a second approach, scientists are synthesizing new analogues of cocaine to see if one of those will bind tightly enough to the dopamine pump to displace cocaine, but not disrupt the working of the pump.

A third approach begins with an effort to identify and study the molecular components of the reuptake pump. Scientists are trying to isolate and remove the pump from neuronal membranes so that they can elucidate its molecular structure. Knowing this structure will allow a more rational approach to designing compounds that might bind to either the cocaine binding site or to another site that can block cocaine binding without altering the action of the pump.

Maternal Drug Abuse and Infant Development

NIDA's research on the effects of maternal drug abuse on infant development has three major goals: 1) to determine precisely the adverse consequences of maternal drug abuse on infant development; 2) to develop ways of preventing and treating these effects; and 3) to provide a reliable base of information useful in developing prevention programs targeted toward pregnant women and other women of childbearing age.

Drug abuse during pregnancy is associated with a number of obstetric and neonatal adverse consequences. A pilot study of women who used cocaine during pregnancy reported an incidence of 31 percent pre-term delivery, 17 percent abruptio placentae, 25 percent low birth weight, 19 percent small gestation age, and 15 percent SID. Behavioral assessments of neonates whose mothers had used cocaine throughout their pregnancies suggested deficient neurodevelopment at 12 and 72 hours postpartum. Animal studies, moreover, suggest longer-term impairments in learning and memory capacities in infants born to cocaine-using mothers.

Clinical studies have documented, as well, a variety of adverse consequences associated with mothers' use of marijuana during pregnancy; these include low infant birth weight and decreased length and smaller head diameter, an indication of delayed brain development. In addition, based on preliminary analyses of a multi-year study, long-term marijuana use by pregnant women was found to impair memory in their children up to 4 years of age. Investigators are continuing to study the long-term effects of marijuana, alcohol, and tobacco use during pregnancy on the auditory functioning, attention deficits, cognitive performance, verbal skills, sensory skills, kinesthetic functioning, memory, intelligence, and academic readiness in neonates and children.

Information regarding the consequences of paternal drug abuse on the offspring was virtually nonexistent until recently. In preliminary analyses of a recent study, investigators found that morphine administration in the male rat just prior to, and during puberty, produced significant effects on the development of their subsequent male progeny via alteration in the male hormone levels. The effects persisted from early in life through adulthood, suggesting that exposure to opiates early in life may have long-term effects on the development of male offspring.

NIDA's research on maternal and paternal drug use and its affect on infant development will be expanded in FY 1991. One area of particular concern will be to follow the offspring of drug using parents to determine if maturation is delayed and if some mental deficits are irreversible.

NEURO-BEHAVIORAL RESEARCH

An understanding of the brain mechanisms underlying and affected by drug addiction are essential to understanding the nature of drug addiction and to developing of biomedical treatments for the central nervous system changes that result from long-term drug abuse. Over the past decade, a model describing a biological basis of drug abuse has been developed. According to this model, drugs are sought because they directly activate the brain's reward system, a neural network responsible for the subjective experience of pleasure.

Focused investigations of the brain's "pleasure centers" have yielded two findings important for the study of drug abuse. First, the dopamine-containing neurons of the ventral tegmental area (VTA), the mesolimbic and mesocortical dopamine projections, were found to be critical links in the reward system. Second, it was found that animals would self-administer certain drugs directly into the reward circuit. Many types of abused drugs including morphine, heroin, cocaine, amphetamine, and possibly nicotine, activate this system, although they may affect different sites in the brain.

While the dopamine synapse may form a final common link in reward processes, it is not the only link in the chain. Opioid-containing neurons and opiate receptors also play a role in this process, and other chemically coded synapses are probably involved as well. The cell bodies of the dopamine-containing neurons located in the VTA contain opiate and nicotine receptors, and the post-synaptic receptors of the terminals are dopaminergic. Whether there is a single brain reward circuit or several will be a matter for investigation in FY 1991.

The direct and powerful activating effect of drugs of abuse on brain reward processes explains why drugs are sought out after initial exposure: they induce pleasure and both people and animals tend to repeat behaviors that produce pleasure. Physical dependence, by contrast, appears to become a motivating factor in drug seeking only later in the addictive process. Indeed, animal studies have shown that physical dependence and brain reward can be dissociated.

The brain reward model explains the "why" of drug abuse, especially the early stages following "experimentation." More significantly, however, the model may also provide the rationale for developing effective pharmacotherapeutic treatment strategies. Although we now have several neurochemical targets upon which to focus our efforts, it is not yet clear whether the most effective way to end cocaine abuse would be to block the cocaine receptor with a cocaine antagonist, to block cocaine-induced reward with dopamine antagonists, or to use dopamine agonists to correct functional dopamine shortage and reduce craving, much like methadone does for heroin addicts. All these possibilities will be explored in FY 1991.

Brain neurons contain two types of dopamine receptors, termed D-1 and D-2. The types are distinguished from each other by their localization in different brain areas, the drugs that bind to them, and the characteristic behaviors they modulate. Recently, the development of drugs that are specific agonists or antagonists for D-1 and D-2 receptors has made it possible to separate dopamine neurotransmission by receptor type. One of the roles of the D-1 receptor is to "enable" D-2 functioning, i.e., the behavioral events modulated by D-2 stimulation require D-1 receptor stimulation for expression. Thus, D-1 antagonists have been shown to block behavioral effects of amphetamine and cocaine even when these drugs were able to increase dopamine levels at D-2 receptors.

Because D-2 antagonists show very narrow dose-response functions, a feature that renders them ineffective as medications, current research is focused on use of a D-1 receptor antagonist, with the goal of tailoring the dose administered to the patient so the effect on cocaine-induced reward/craving is maximized while the distressing neuroleptic side effects are minimized.

Cocaine does not induce the kind of physical dependence produced by opiates, though abstinence does lead to intense cravings for more of the drug that drive people to use it even when they want to stop. In both experimental and clinical conditions, drugs that substitute for cocaine, even if the drug is much weaker or has different effects than cocaine, can "prime" cocaine seeking behavior. There are, therefore, problems in trying to develop a replacement therapy for cocaine, though study of this will be a priority in FY 1991.

PREVENTION

NIDA's prevention research program includes three major components: 1) investigations of the etiology of drug abuse; 2) the development and evaluation of prevention programs; and 3) abuse liability studies designed to restrict the availability of new medications that have a high probability of being abused.

Etiology

Even in areas where drugs are plentiful, there are wide differences in patterns of use. The development of successful prevention programs is dependent on an understanding of factors that increase or decrease an individual's risk of becoming drug dependent. Research on these risk factors is one of NIDA's highest priorities.

Genetic Risk Factors

Research on possible genetic risk factors is based on the hypothesis that genetically caused differences in neurotransmitters and receptors in the central nervous system might make some individuals more vulnerable to the effects of drugs. Research is currently being conducted in both animals and humans.

In animals, strains of rats and mice have been developed that show differing responses to opiates. Other strains of mice have been developed that show the inheritance of two behaviors normally induced by cocaine or PCP. One finding that has emerged from this research is that strains of rats and mice that find alcohol reinforcing will also take opiates and cocaine, while strains of rats and mice that do not use alcohol will not take opiates and cocaine either.

In humans, only one adoption study of drug abuse has been conducted to examine the role of genetic risk factors for drug abuse. This study, which matched groups of adoptees with and without psychopathology in their first-degree relatives, found drug abuse to be associated with both genetic and environmental factors; i.e., it appears unlikely that specific "addiction" genes exist. Rather, the biological contributions to drug vulnerability probably result from interactions among several genes, each of which regulates a common and necessary biological system. In the case of persons who would be at high-risk for drug abuse, the specific versions of these genes are present in a combination which is most conducive to making a drug an effective reinforcer. One important area where several genes could act in concert to produce an organism highly responsive to drugs is in the nucleus accumbens, where dopaminergic and other pathways interact in ways important to the reinforcing effects of drugs. Normal variations in numbers of receptors, metabolic enzymes, and second messenger systems could, in high risk individuals, be combined in a manner which maximizes a drug's effect. In FY 1991, additional research will be conducted in both animals and humans to clarify these issues.

Psychiatric Risk Factors

A close association exists between psychiatric disorders and drug abuse. It has long been recognized that psychopathology is more prevalent among drug abusers entering treatment than among members of the general population. In one study, for example, 93 percent of opiate addicts in treatment met diagnostic criteria for one or more psychiatric disorders, with the most common being antisocial personality disorder, affective disorder, and anxiety disorder.

Three possible etiological relationships may exist between drug abuse and psychiatric disorders. First, a psychiatric disorder may predispose an individual to drug abuse. For example, an individual with antisocial personality disorder may be attracted to drug users, thereby increasing the likelihood of drug use. Or depressed or anxious people may use drugs to improve their psychological state. Second, a psychiatric disorder may be a consequence of drug abuse. The chronic use of drugs may affect brain functioning in such a way that it eventually leads to psychiatric disorders such as depression and anxiety. Third, it may be that both psychiatric disorders and drug abuse are the result of a third factor. For example, genetic or environmental factors may predispose a person to both psychiatric disorders and drug abuse.

Research has yielded evidence for all three relationships and it appears likely that all three are manifested in different individuals. Because of the importance of understanding these relationships for drug abuse prevention and treatment programs, NIDA will expand research in this area in FY 1991. Longitudinal studies will follow the development of psychiatric disorders and drug abuse within individuals over time. If the nature of the relationship between psychiatric disorders and drug abuse is established, interventions can be developed to treat the psychiatric disorder to prevent the later development of drug abuse, or to treat drug abuse to prevent the later development of the psychiatric disorder.

Psychosocial and Behavioral Risk Factors

Until the very recent past, most drug abuse prevention programs have been directed at psychosocial and behavioral influences which may increase or decrease the likelihood of drug abuse. NIDA has been a major supporter of research in this area and continues to be actively involved in it. The goal of this research is to build a solid foundation of knowledge about factors that predispose or protect an individual from drug abuse and to use it to develop more effective prevention programs. Research over the past 10 years has resulted in a number of hypotheses about psychosocial and behavioral factors which exacerbate an individual's chances of drug abuse and which may serve as predictors of future drug abuse.

Studies have found that high sensation-seeking youth at the junior and senior high school level initiate greater use of marijuana, cocaine, alcohol, and other drugs by ratios from 2:1 up to 7:1 compared to low sensation-seeking youth. This research offers a promising approach for identifying youth at risk of drug use and designing more effective prevention media messages and prevention programs. NIDA now is assessing the efficacy of professionally developed anti-drug prevention media messages tailored for sensation-seeking adolescents.

Sensation seeking in humans may be biologically based. High sensation seekers tend to have low monamine oxidase levels in blood platelets. NIDA researchers using animal models are attempting to determine if novelty-seeking behavior may involve the dopamine system which is involved with drug abuse. It has been found, for example, that the sensation seeking rats' preference for novel situations decreased in a dose-related fashion when they were given a dopamine antagonist. These findings may make it possible to develop diagnostic tests to identify high sensation-seeking youth and to develop effective pharmacological and behavioral treatments for them. Research in this area will be a priority in FY 1991.

Intervention

In FY 1991, NIDA will continue to assess the efficacy of existing drug prevention programs and will intensify its research focus on process, outcome, and impact research. Process research attempts to validate the preventive intervention by determining its theoretical underpinnings and documenting the appropriateness of its implementation. Outcome research tests the efficacy of specific program components through controlled laboratory and field studies. Impact research measures the cumulative effects of multiple drug and alcohol prevention programs operating concurrently within a community and the additive effects of prevention programming at the local, State, and national level operating over multiple years. In addition, impact research focuses on the cost-benefit of drug prevention policy and program initiatives. Given its importance to the field of drug abuse, cost-effective and cost-benefit analysis impact research will become an important focus of future prevention research.

Because research indicates that both population-wide prevention approaches and interventions targeted to high risk populations have the potential of influencing drug use trends, NIDA will examine both. Prevention intervention studies targeted to ethnic and minority populations who may be at special risk of drug and alcohol abuse due to social and economic deprivation also will be supported.

In FY 1991, prevention research will focus on: 1) the efficacy of persuasive media/communications programs to increase public awareness and effect changes in health-related beliefs, attitudes, knowledge levels, and drug-related behaviors; 2) the cost-benefit analysis of drug screening as an adjunct for prevention programming in the school, community, and workplace; 3) the role and efficacy of self-help groups in relapse prevention; and 4) the efficacy of comprehensive prevention programming directed to youth at risk of multiple problem behaviors associated with drug abuse.

New/Innovative Prevention Programs

To date, drug abuse prevention research has largely been limited to the study of didactic instruction that attempts to increase drug knowledge, foster negative drug attitudes, and promote adoption of alternatives to drug use. More recently, social skills training to resist peer pressure to use psychoactive substances has been tested under the rubric of social learning theory. Reviews of the research indicate that these approaches may have positive, yet limited effects on drug behavior. However, numerous other learning models have the potential for the design of more effective drug prevention programs. Learning strategies from cognitive psychology such as concept mapping, mental rehearsal, and scripted cooperation have been successfully tested in several academic areas and appear to better transmit information on drug use consequences and to teach appropriate preventive behaviors.

Classical and operant conditioning theories have helped explain both the acquisition and endurance of drug taking. However, the same learning principles that have helped to explain drug abuse have potential for the design of more effective prevention strategies, such as the use of token economies to shape behavior. Educational techniques such as mastery learning and computer-assisted instruction that are based on operant learning principles are currently being tested as drug prevention strategies within elementary schools, and need to be expanded to include older students, particularly for high-risk populations.

Research consistently has shown that the onset and maintenance of drug use behavior is correlated with negative affective states including poor self-image, frustration with life, boredom, loneliness, and stress-related anxiety; while the reverse of these affective states are associated with a drug-free status. Health educators believe that unless the attitudes, beliefs, and motives guiding health choices are also changed, the prevention or drug cessation effect from a prevention or treatment program will not endure, as has been shown by self-efficacy research in smoking cessation as well as in phobia treatment.

Community Prevention Research

Research will be supported to assess the relationship that may exist between a variety of social influences affecting individuals, families, and communities, and positive prevention outcomes. Prevention effects may not be attributable to a specific demand or supply reduction strategy. They may require a critical mass of public perceptions and actions over a long time before they can be measured by national drug surveys. Investigations of the immediate and long-term consequences of comprehensive multi-component drug prevention programs designed to reshape the health environments of communities, States, and the Nation will be made in FY 1991.

Abuse Liability Studies

Keeping drugs with high potential for abuse off the market is a prevention strategy. The abuse potential of substances that act on the central nervous system is assessed by means of a battery of tests in laboratory in animals. In upcoming years, this research will assume even greater importance because of the development of new classes of both licit and illicit drugs. Information on the abuse potential of these drugs developed by NIDA is used by the Department of Health and Human Services and the Drug Enforcement Administration of the Department of Justice to make recommendations and decisions about scheduling drugs under the Controlled Substances Act. This information is also used to make international scheduling decisions.

TREATMENT

NIDA's drug abuse treatment program consists of: 1) research to improve the effectiveness and efficiency of drug abuse treatment, 2) the development of new medications for treating drug abuse; and 3) health services research directed at improving drug abuse treatment delivery systems.

Improvement of Treatment Effectiveness

NIDA has placed and continues to place high priority on research to improve the effectiveness of drug abuse treatment through the provision of a variety of treatment and other services to drug abusers. Currently most drug abuse treatment falls into the following categories: 1) various types of verbal therapy, including counseling and psychotherapy either individually or in small groups; 2) residential treatment focused on drug abstinence and on rehabilitating the patient toward more acceptable attitudes and behaviors; 3) skills development, which includes vocational training, job finding skills, assertiveness skills, and relaxation and stress management; and 4) peer support or self-help groups often modeled after Alcoholics Anonymous. Two other treatment approaches which have not been widely adopted and are still considered experimental are contingency management, which sets up incentives for therapeutic behavioral change, and conditioning therapy, which is based on classical conditioning theory to extinguish drug craving and withdrawal symptoms. Research on these approaches is intended to determine which methods work, how effective they are, and how their effectiveness may be maximized.

A major source of information on treatment effectiveness has been large scale studies of treatment outcome. Two NIDA-sponsored studies (the Drug Abuse Reporting Program (DARP) and the Treatment Outcome Prospective Study (TOPS)) collected information on tens of thousands of patients in the 1970s and 1980s, and have provided much of the most reliable information on the effectiveness of drug abuse treatment. In FY 1989, funds provided by the Anti-Drug Abuse Act of 1988 made it possible for NIDA to launch the Drug Abuse Treatment Outcome Study (DATOS). This study will collect data on 20,000 individuals coming into 5 treatment modalities in 50 treatment programs over a 5-year period. Information will be collected from interviews conducted at treatment entry, during treatment, and upon leaving treatment. Patient interviews will be supplemented with clinical assessments of psychological, social, and physical impairments in addition to drug and alcohol dependence. Treatment outcomes will be compared for clients entering treatment with varied patterns of drug abuse and levels of psychosocial impairment. One area of special interest is to determine how well the service provided in treatment are matched to the need for those services. Continued funding for this effort will be one of the NIDA's highest priorities in FY 1991.

A second source of information on treatment effectiveness comes from small scale studies of the treatment process that focus more intently on exactly what happens during treatment. In FY 1991 studies of various programs developed to prevent relapse to drug abuse following treatment will receive high priority.

Drug Abuse Treatment Medications Development

In FY 1989, with supplemental funds provided by the Anti-Drug Abuse Act of 1988 and new HIV/AIDS funding, NIDA established a formal drug abuse treatment medications development program and almost tripled funding for medications development. In FY 1990, NIDA will establish a new extramural research division devoted solely to the development of new medications for the treatment of drug abuse. By FY 1991, this division will be fully operational and will coordinate all of NIDA's medications development programs, from basic biological and chemical studies to mandatory clinical trials for new medications. The establishment of this division reflects NIDA's long-term commitment to what is unarguably a long and expensive process. The pharmaceutical industry estimates that it typically takes 7 years and $10 million to develop a new medication.

While the beginning stages of drug abuse can be viewed as voluntary behavior, it is clear that drug addiction leads to fundamental changes in brain function. One goal of treatment is to restore, to whatever degree possible, normal brain activity; for this, the development of new medications offers the most promise. The goals of the program are to develop new medications which: 1) are as efficacious as current medications but have fewer side effects, e.g., a non-addictive methadone substitute; 2) block the behavioral and physiological effects of abused drugs; 3) reduce craving for abused drugs; 4) moderate or eliminate withdrawal; and 5) block or reverse the toxic effects of abused drugs.

Emphasis is being placed on medications that NIDA has been developing for a number of years: LAAM, naltrexone, and buprenorphine. As a result of a cooperative effort between NIDA and Dupont, naltrexone has an approved New Drug Application and is now on the market. As yet, no pharmaceutical company has been willing to develop LAAM and we are continuing to try to find a contractor to develop this medication. We are also conducting clinical trials of buprenorphine at the Addiction Research Center, our intramural facility, and seeking a contractor to develop this medication.

In an effort to identify systematically potential new medications, in FY 1990 NIDA will establish a comprehensive data base on chemical entities with central nervous system activity. The database will include existing compounds as well as compounds developed on the bases of structure-function activity, computer-aided medication design, knowledge of receptor pharmacology, and knowledge of the functional bases of drug reward, euphoria, dysphoria, and dependence. New potential medications that meet basic pharmacological parameters for candidate treatment agents will be evaluated for potential efficacy and safety in animals. If these tests are successful, clinical trials will be initiated.

Three issues concerning potential toxicity of new compounds are of special concern. First, because these medications target the brain, special attention must be given to both acute and long-term toxicity. Second, because many of the medications being developed will be used in people who are HIV positive or at risk of HIV infection, caution must be taken not to accelerate the course of the disease or increase the likelihood of infection. Third, because many drugs of abuse can produce fatal reactions, there is concern that the new medications not exacerbate these reactions.

Patient compliance with treatment, a problem common in medicine, is especially critical in drug abuse treatment. Efforts are underway to develop new, long-acting dosage forms and dosage forms with limited abuse potential, including, for example, a clinically useful depot (long acting) preparation of naltrexone to provide blockade for a period of 1 month. Research will also be supported for oral muco-adhesive products, skin patches, and other delivery systems that will help patients stay on their medications while preventing diversion. The abuse potential of some new medications may be modified by making preparations that are effective when swallowed and ineffective if they are ground up and injected.

Many current efforts are directed at medications for cocaine. Because of the enormously powerful biological dependence cocaine produces, research has focused on the development of medications that will reduce craving and break the frequent sequence of relapse following detoxification. Among the number of medications now being investigated which will interfere with this process are the tricyclic anti-depressants, which are believed to normalize dopaminergic balance. Several of these medications, including imipramine, desipramine, and doxipen have been tried with some success in small groups. Further research on these medications will be a high priority in FY 1991.

Another class of compounds being studied are direct dopamine agonists--agents that mimic dopamine and thus counteract the depletion caused by chronic cocaine use. Studies on these medications have shown mixed results to date.

Researchers also are examining the usefulness of medications opposite in action to the dopamimetic class that would fill post-synaptic receptor sites and essentially block the effect of the cocaine-induced synaptic excess of dopamine might be useful. Small trials with two of the most commonly used dopamine blockers, chlorpromazine and haloperidol, have appeared to make the patients worse by augmenting withdrawal depression. However, another medication in this class, flupenthixol, has shown excellent results in an open trial. If the results of an imminent larger, placebo-controlled study are promising, larger scale trials will be initiated in FY 1991.

Health Services Research

Apart from NIDA-sponsored surveys such as the National Drug and Alcoholism Treatment Utilization Survey (NDATUS), relatively little research has been conducted on systematic features of the drug abuse treatment system and how they affect the delivery of drug abuse treatment services. To remedy this problem, NIDA established a Financing and Services Research Branch in FY 1989 to strengthen and coordinate NIDA's health service research program.

In FY 1991, studies will examine why treatment systems have evolved as they have, and the forces currently influencing system changes; and the reasons variations in cost, by setting. Studies will also be made of the extent and adequacy of coverage for substance abuse services in both the public and private sectors with the aim of determining whether adjustments could result in promoting access to more appropriate treatment.

The impact of Health Maintenance Organization (HMO) and Preferred Provider Organization (PPO) delivery and financing arrangements on access to and use of drug abuse services also will be studied. These studies will examine the cost and impact of various service options in managed care programs. Urgent research questions include determining the relationship between stated coverage by HMOs and PPOs of drug abuse services, and the actual provision, access, and cost of such services and, secondly, whether HMOs and PPOs are selecting "low" risk persons or discouraging enrollment of "high" risk persons in an effort to control costs of drug abuse treatment services.

A longitudinal analysis of health care costs and the use of health care services by individuals and their families with drug abuse problems also will be initiated in FY 1991.

EPIDEMIOLOGY

NIDA has developed a large number of regularly supported data collection systems that provide information on the incidence, prevalence, morbidity, mortality, and other adverse consequences of drug abuse. The following is a brief description of NIDA's major, ongoing surveillance systems.

The National Household Survey on Drug Abuse is a national prevalence survey that was first conducted in 1971. It remains the single most important measure of drug abuse in the general population. In the past, it has been conducted every 2 or 3 years, with the latest study completed in 1988. The methodology has been comparable for all the studies. In the 1988 study, young people (12 to 17 years old), blacks, and Hispanics were oversampled to produce more accurate estimates of drug abuse among these groups. Funds provided by the Anti-Drug Abuse Act of 1988 will make it possible to conduct the survey annually.

The National High School Senior Survey measures drug abuse among high school seniors. It has been conducted annually since 1975 and is based on a sample of approximately 17,000 seniors in public and private high schools. The measures and procedures employed have been standardized and applied consistently since 1975. The survey excludes dropouts and may, therefore, result in a somewhat conservative estimate of drug abuse in the age group reflected by the senior class population. However, the stability of the survey provides excellent data for monitoring drug abuse trends, including incidence and prevalence rates and related changes in attitudes about drugs. NIDA is currently investigating several options for collecting similar data on high school dropouts and will attempt to conduct such a survey in FY 1991.

DAWN is a large-scale, ongoing drug abuse data collection system of a non-random sample of emergency room and medical examiner facilities. DAWN information reflects those drug abuse occurrences associated with an emergency room visit and/or death. The major objectives of the DAWN data system include the monitoring of drug abuse patterns and trends, identification of substances associated with drug abuse episodes, and the assessment of health hazards associated with drug abuse.

The NDATUS is an ongoing, voluntary national survey designed to measure the location, scope, and characteristics of drug abuse and alcoholism treatment and prevention facilities, services, and activities throughout the U.S. The NDATUS is the only survey which includes privately as well as publicly funded programs. Data collected include treatment unit identification, type and scope of services provided, sources of funding, and information on staffing and the population served. The most recent NDATUS was conducted in 1989.

The State Alcohol and Drug Abuse Profile (SADAP) survey has been conducted annually since 1982 by the National Association of State Alcohol and Drug Abuse Directors (NASADAD). This survey collects aggregate treatment program data on funding allocations and treatment unit and client characteristics in a uniform format using statistics available at the State level.

The Community Epidemiology Work Group (CEWG) consists primarily of researchers from selected metropolitan areas of the U.S. These researchers meet semi-annually with NIDA staff, experts from European countries, and representatives of other interested groups to assess the drug abuse picture in their respective areas. Functions of the CEWG include provision of current evaluations of drug abuse patterns and trends, indication of new abuse substances, identification of groups most likely to be affected, and the transfer of epidemiologic information.

The 1988 National Maternal and Infant Health Survey (NMIHS) is a national probability survey of all registered births to U.S. women who had a live birth, stillbirth, or an infant who died before 1 year of age in 1988. Data collection was completed in late 1989 and a follow-up survey of participating mothers will be fielded in 1990. Drug abuse questions were added to this survey to provide information on smoking tobacco, the use of marijuana, or the use of cocaine during pregnancy. Responses will help to elucidate the association between substance abuse during pregnancy and child development through 2 years of age.

In spite of this variety of data collection systems, informational gaps exist. Closing these gaps will be a priority in FY 1990 and FY 1991. Funds from NIDA's research budget and the mandated set-aside from the Alcohol, Drug Abuse and Mental Health Services block grant will be used to support the following activities.

- o Research to obtain reliable baseline data characterizing the prevalence of alcoholism, drug abuse, and adverse effects among such "hidden" populations as the transient, homeless, institutionalized, chronically mentally ill, or precariously housed;
- o Transformation of the DAWN system to a probability sample at the metropolitan area and national levels, to permit national, regional, and local estimates of drug abuse episodes that are representative of those areas and compatible among areas.
- o Expanded collection of data, in both urban and rural areas, on the nature, extent, and consequences, on drug abuse among women of childbearing age; studies in New York City and Chicago suggest that large metropolitan areas, particularly, may be experiencing an epidemic of HIV-infected and cocaine-intoxicated newborns among center city women.

NIDA's surveillance program also encompasses epidemiologic investigations, including etiologic studies and field studies, in which staff investigate numerous reports each year about drug abuse outbreaks, the emergence of new drug analogs, unusual adverse consequences of drug abuse, and risk factors and individuals who are at risk for using drugs. For example, a team of medical epidemiologists recently investigated an outbreak of "ice," a smokable form of methamphetamine, in Hawaii. NIDA's involvement in outbreak investigations and field studies includes recommending how to improve prevention and treatment programs and identifying data needs in response to new drug epidemics. The field studies staff provide assistance to State and local health departments and to Community and State Epidemiology Work Groups in investigations of drug-related morbidity and mortality. Epidemiologic investigations are an important adjunct to national data collection activities, largely because they serve to uncover complexities associated with a given outbreak and allow for in-depth etiologic analyses of unique events and circumstances surrounding it.

INTRAMURAL RESEARCH

The NIDA Intramural Research Program (IRP) conducts a comprehensive research program dealing with the causes, diagnosis, treatment, and prevention of drug abuse, as well as the biological and psychosocial factors that determine human behavior and development. The intramural research program supports approximately 113 investigators and operates 11 laboratories and clinical branches at the Addiction Research Center (ARC), located in Baltimore, Maryland. Over one hundred research projects in the basic neurosciences, clinical pharmacology, and behavioral sciences are conducted in this facility each year. Significant accomplishments and opportunities in the NIDA intramural research program are incorporated in the research narrative justification under the appropriate headings.

Summary of Changes

The FY 1991 budget request includes $24.1 million for the NIDA Intramural Research Program. This represents a increase of 12 FTEs over FY 1990 of 101 FTEs. The budget includes an increase of $2.7 million (12.7 percent) over the FY 1990 level. This increase represents a program expansion of $1.7 million for drug abuse treatment and the 12 FTEs and $1.0 million for built-in requirements, as displayed in the following table:

Built-in Increases	
Jan. 1990 pay annualization	+$57,000
Jan. 1991 pay increase	+174,000
Within grade increases	+74,000
Increased FERS costs	+16,000
Increased Social Security (FICA)	+14,000
Increased cost of non-pay items including laboratory materials and other supplies	+473,000
Restoration of program cuts used to absorb Jan. 1990 pay raise	+170,000
One extra day of pay	+20,000
Subtotal, Built-in Increases	+998,000
Program Increases	
Salaries & Program Support for 12 additional FTEs	+720,000
Expanded Intramural Research on drug abuse treatment	+1,000,000
Subtotal, Program Increases	+1,720,000
Total, Increases	+2,718,000

RESEARCH MANAGEMENT AND SUPPORT

The Office of the Director plans, directs, coordinates and evaluates the Institute's programs. Three staff offices assist in this management function. The Office of Policy and External Affairs coordinates the development of Institute policy and acts as a liaison with drug abuse professionals in State and local governments and foreign governments. The Office of Planning and Resource Management provides financial management, program planning, personnel management, and grants and contract administration. The Office of Extramural Project Review coordinates the initial scientific review of grant and contract applications.

Five program divisions management the research activities of the Institute. The Divisions of Preclinical Research, Clinical Research, Applied Research, and Epidemiology and Prevention Research manage research grant, contract, and training programs. The Division of Applied Research, in addition to its research activities, also conducts NIDA's Workplace Initiatives programs. These include the provision of assistance to federal, State and private managers in the development and operation of drug screening programs, management of the national laboratory certification program, and provision of technical assistance on the science and technology of conducting employee drug testing.

The FY 1991 request includes an increase of $.8 million to support expanded data collection activities. Over the past several years, a major expansion of data collection activities, which are funded from the research account and from the mandated 5 percent set-aside of the ADMS block grant program has resulted in a major increase in the amount of data processed and in support costs associated with data collection activities. By FY 1991 we will have new data from the expanded Household Survey, NDATUS, DAWN, and the Metropolitan Area Studies, as well as a number of other smaller studies. In order to expedite analyses and, thus, to be able to answer specific requests, NIDA staff processes much of this data on Federally owned and operated computers; costs incurred include significantly increased storage and operation costs, as well as the cost of running special analyses and making the information available in printed form.

The FY 1990 level reflects the movement of $1.5 million from the intramural program and $2.2 million from regular extramural contracts into the regular research management and support section. The $1.5 million moved from the intramural program reflects a reorganization of the Institute's services research activities. The 10 FTEs associated with the reorganization were moved from the intramural program to RMS in FY 1989. The $2.2 million represents a proposed reprogramming of extramural contract funds to the RMS account and is necessary to support the Institute's expanded research and data collection activities. The reduction in contracts, which amounts to approximately 7 percent of our total contract program, will be obtained by reductions in selected ongoing and new contracts.

Summary of Changes:

The FY 1991 request of $33,338,000 reflects an increase of $6,276,000 over the comparable FY 1990 level. The increases are identified as follows:

Built-in Increases	
Jan. 1990 pay annualization	+$107,000
Jan. 1991 pay increase	+469,000
Within grade increases	+185,000
Increased PHS Service & Supply Fund	+46,000
Increased FTS costs	+6,000
Increased FERS costs	+46,000
Working Capital Fund transfer	+2,000
Increased Rental Payments to GSA	+58,000
Increased Social Security (FICA)	+34,000
Increased cost of non-pay items including laboratory materials and other supplies	+189,000
Annualization of 50 new positions in 1990	+1,862,000
Restoration of program cuts used to used to absorb Jan. 1990 pay raise	+321,000
One extra day of pay	+51,000
Subtotal, Built-in Increases	+3,376,000
Program Increases	
Salaries & Program Support for 35 additional FTEs	+2,100,000
Support of data collection activities	+800,000
Subtotal, Program Increases	+2,900,000
Total, Increases	+6,276,000

B. Demonstrations

Authorizing Legislation - Section 509G of the Public Health Service Act.

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$128,152,000	$109,934,000	-$18,218,000

1991 Authorization.................... Indefinite

Purpose and Method of Operation

The National Institute on Drug Abuse sponsors research demonstrations to collect information on the effectiveness of new and innovative, as well as established, drug abuse treatment programs These efforts are sponsored through grants and contracts.

Funding levels for the past five fiscal years were as follows:

1986...................................	$0
1987...................................	$14,000,000
1988...................................	$51,504,000
1989...................................	$97,885,000
1990...................................	$128,152,000

Demonstrations

	FY 1989 Actual		FY 1990 Estimate		FY 1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount
Grants:						
Continuations.........	30	$28,417,000	63	$68,125,000	91	$77,758,000
N/C Combined..........	40	44,453,000	50	29,597,000	---	---
Subtotal.RPG........	70	72,870,000	113	97,722,000	91	77,758,000
Contracts..............	24	25,015,000	35	30,430,000	35	32,176,000
Total Demonstrations	94	97,885,000	148	128,152,000	126	109,934,000

Rationale for the Budget Request

The FY 1991 request for demonstrations of $109.9 million includes $63.3 million for HIV/AIDS demonstrations, a decrease of $18.3 million or 22 percent from the FY 1990 level, and $46.6 million for regular drug abuse demonstrations, the same amount as in FY 1990. NIDA's HIV/AIDS demonstration program is described in the HIV/AIDS portion of the budget request.

The request includes a proposed decrease of $18.3 million, or 14 percent, in the Institute's total demonstration programs. This decrease is associated with the completion of major portions of the HIV/AIDS Outreach Demonstration

Program. This program, which was intended to demonstrate effective ways of recruiting intravenous drug abusers into treatment, was started in FY 1987. Most of the new grants and contracts funded in FY 1987 and FY 1988 had three year project periods and will receive their last support from NIDA in FY 1989 and FY 1990.

The regular drug abuse demonstration program began in FY 1989 with $7.0 million for demonstrations of drug abuse treatment and vocational training, prevention and treatment programs for intravenous drug abusers, and programs for pregnant and postpartum women and their children. The Anti-Drug Abuse Act of 1988 provided an additional $40.0 million for demonstrations in FY 1990. These programs, which will be continued in FY 1991, are described below.

Washington, D.C. Initiative

NIDA will establish several "model" facilities in Washington, D.C. that: 1) can serve as an example for drug treatment providers while also yielding valuable research information; 2) will provide training opportunities for treatment workers and researchers; and 3) will become a resource to researchers seeking to conduct studies of new drug abuse treatments. The facilities will include two outpatient treatment clinics, a diagnostic unit, a residential therapeutic community, and a residential crisis treatment unit. Research to be conducted within the diagnostic unit will identify individuals with both substance abuse and psychiatric problems, develop predictors of treatment success, and establish criteria for matching clients to the appropriate types of treatment. Research in the treatment clinics will concentrate on developing and demonstrating the efficacy of methods of treatment including pharmacotherapies and establishing the appropriate mix of support services.

Research Demonstrations to Improve Drug Abuse Treatment

By providing a greater range of effective, standard treatments, this program will enable treatment systems to operate with greater effectiveness and efficiency. Research demonstrations will focus on the effectiveness of improvements in existing treatment strategies and the efficacy of new therapeutic interventions. Research will be supported on the treatment of opioid, cocaine, and polydrug abuse, as well as treatment of abuse of "gateway" drugs. Emphasis will be given to improving the attractiveness of treatment programs; improving retention; improving compliance; and preventing relapse.

To improve the attractiveness of treatment programs, studies will be made of service delivery arrangements which provide more services relevant to the needs of clients, cultural appropriateness of recruitment and intake arrangements, special training needs of outreach and intake workers to increase their interpersonal skills, and the establishment of clinic policies that do not discourage new clients.

Work in therapeutic community treatment has provided models of program changes that increased retention and that have potential application in other modalities (e.g., induction seminars, pairing experienced and successful clients with new clients to deal with their concerns and fears regarding treatment). Structural changes in clinic operation and policies will also be studied to determine their effect on improving retention and compliance of clients.

A major problem of treatment is the use of both licit and illicit substances while in treatment, as for example with opioid clients who use cocaine or problematic amounts of alcohol while in methadone maintenance. Research will be supported to lessen the use of these substances during treatment. Pharmacological strategies (such as adjusting methadone dosage) may also be useful in improving compliance.

The linking of aftercare or self-help groups to structured treatment will be studied. Systematic testing of relapse prevention models will be made, as well as studies to ascertain which client types do well in relapse prevention training programs.

Comparisons of the Efficacy of Psychotherapy and Drug Abuse Counseling Strategies in the Treatment of Cocaine Abusers

While NIDA has placed a high priority on the development of pharmacological agents for the treatment of drug abuse, special attention is also being placed on nonpharmacological treatment approaches. This attention is warranted because of two reasons: first, there are no approved treatment agents for abusers of non-opiate drugs; and pharmacological agents must be used in conjunction with other forms of treatment to be most effective. Research on psychotherapy has generally shown that patients receiving psychotherapy do better than those in placebo groups or those in no treatment control groups. However, it has not been demonstrated consistently that one type of psychotherapy is more effective than another. NIDA is, therefore, initiating research demonstrations to determine the efficacy of a number of non-pharmacological drug abuse treatment programs for cocaine abusers.

These demonstrations will support comparative psychotherapy/drug abuse counseling treatment efficacy studies, using a common protocol, at multiple, collaborative treatment sites. These studies will compare the efficacy of different psychotherapy/counseling approaches for cocaine abusers and the nature of any interaction between patient characteristics, particularly degree of sociopathy and other personality disorders.

The collaborative study will compare the efficacy of two types of psychotherapy with drug abuse counseling. One of the therapies studied will be a form of relapse prevention, a frequently used, cognitive-behaviorally oriented therapy which has been adapted for the treatment of substance abuse.

These studies will be conducted in four phases over 5 years. The first phase will develop a common study plan and the selection and/or development of specific research protocols. The second phase will involve pilot testing in all of the instruments, psychotherapy/counseling strategies, and the research protocols at all sites. The third phase will involve multi-site, comparative clinical trials of psychotherapy/counseling strategies. In the final phase, data will be analyzed and the results published.

Research Demonstrations for the Treatment of Women of Child Bearing Age and Their Children

Research demonstrations will be supported to develop new therapeutic approaches or correct deficiencies in existing clinical programs designed to treat drug abusing women of child-bearing age as well as pregnant women, postpartum women, and their infants. As noted previously, there is increased awareness of the wide array of potential consequences of maternal drug abuse to offspring. Previous research has shown that the elimination of, or any reduction in, the use of illicit drugs as a result of enrolling and retaining women who are pregnant or are of child-bearing age in a comprehensive drug treatment program can forestall potentially harmful consequences for both the women and the offspring. Because many adolescent or young adult women are difficult to place and maintain in traditional drug abuse treatment programs, extensive community outreach and retention efforts are needed to eliminate existing barriers to treatment for these women.

NIDA will support controlled clinical research demonstration studies designed to investigate the direct and interactive effects, and the short-term as well as the long-term effectiveness, of comprehensive drug abuse treatment programs based in a variety of settings (e.g., hospitals, outpatient clinics, residential facilities). In addition to drug abuse treatment, such programs will provide a range of other social and health care services for drug-abusing women and their children. The projects also deliver a continuum of care throughout the prenatal and postnatal periods, including detoxification or methadone maintenance before and after delivery as well as general medical follow-up care for the mother and infant, psychotherapy, crisis counseling, social support activities, and vocational or educational training where appropriate. Parent training sessions will be included for the woman and other members of her family in order to introduce effective child care and child-rearing practices to all potential caregivers. These skills promote maternal-infant attachment and also provide training in the case of an immature or multiple handicapped child.

Use of Community Support Services

During the past decade, social support systems have been suggested in several studies for maintaining drug free living. Researchers found that heroin users who stopped using heroin without entering treatment frequently did so in association with changes in the social support systems available to them, in particular, family members and new peer groups. Other studies reported that youthful drug abusers with non-drug using peers were more likely to remain drug-free after treatment than those youngsters without non-drug using peers. The role of family in the rehabilitation of alcohol and drug abusers has been described and various interventions have made use of the role which can be played by supportive figures in the work setting.

In recognition the importance of strong community supports for drug-free living, NIDA will conduct studies regarding the nature and extent to which social support systems exist and can be marshaled to support individuals' efforts to become or to remain drug free. Priority will be placed on efforts to demonstrate the extent to which different strategies succeed in assisting former drug users to remain drug free after exiting treatment and criminal justice systems. Such issues as the willingness of service providers to make themselves available to persons identified as former or recovering drug users will be investigated.

Clinical Trials of New Medications for Drug Abuse

NIDA programs are being planned that will systematically explore new compounds and shepherd them through the early stages of drug development. In addition, there are currently a substantial number of promising agents for drug abuse treatment that have already been developed for other medical indications or have otherwise been brought to Phase I development. NIDA anticipates, therefore, that there will be a number of innovative agents suitable for Phase II and III development over the next several years. The objective of improving drug abuse treatment is to engage in a cooperative agreement with the research community to develop an efficient, systematic clinical trials program that would 1) conduct Phase II and Phase III studies of promising new agents, and 2) evaluate innovative ways of substantively improving established pharmacotherapies. The guiding principle in devising these trials will be that they have a direct bearing on the development of improved pharmacological interventions that will materially enhance our ability to treat persons with serious drug abuse disorders. The major objective of this system will be to produce homogeneous studies conducted with precise, standardized protocols and relatively large numbers of patients. In this way, statistically powerful data analysis can be conducted and a broad range of patient types can be studied.

III. Alcoholism

Budget Authority by Mechanism

	1989 Actual		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount
Research Project Grants:						
Continuations...........	246	$40,216,000	277	$48,571,000	381	$70,721,000
Admin. Supplements......	(16)	767,000	(11)	385,000	(11)	406,000
New/Competing Combined..	154	24,777,000	190	32,404,000	81	14,427,000
Subtotal, RPG.........	400	65,760,000	467	81,360,000	462	85,554,000
Trmt Outcome Res (non-add)	(3)	(1,141,000)	(13)	(3,901,000)	(13)	(4,087,000)
Research Centers..........	12	15,134,000	14	17,663,000	14	18,472,000
Other Research:						
Research Career Programs.	25	1,529,000	38	2,300,000	37	2,300,000
Cooperative Agreements...	5	3,768,000	8	5,371,000	8	5,371,000
Instrumentation Grants...	25	501,000	10	500,000	10	482,000
Small Grants.............	15	424,000	6	378,000	6	378,000
Subt., Other Research...	70	6,222,000	62	8,549,000	61	8,531,000
Total, Research Grants	482	87,116,000	543	107,572,000	537	112,557,000
Research Training:	FTTP		FTTP		FTTP	
Individual Awards........	7	142,000	28	675,000	35	905,000
Institutional Awards.....	118	2,654,000	95	2,497,000	94	2,482,000
Total, Res Training...	125	2,796,000	123	3,172,000	129	3,387,000
	No.		No.		No.	
Res. and Dev. Contracts...	18	4,834,000	18	5,509,000	19	5,538,000
Subtotal, Extram. Res...		94,746,000		116,253,000		121,482,000
	FTE		FTE		FTE	
Intramural Research.......	96	15,142,000	99	18,525,000	100	19,525,000
Res. Mgmt. & Support......	117	9,621,000	119	11,114,000	123	12,217,000
Total, Research.........	213	119,509,000	218	145,892,000	223	153,224,000
	No.		No.		No.	
Homeless Demonstration....	10	4,545,000	18	16,378,000	18	9,498,000 1/
Total, NIAAA.......		124,054,000		162,270,000		162,722,000
(HIV/AIDS non-add)		(6,130,000)		(8,211,000)		(9,203,000)
FTE............		213		218		223
(HIV/AIDS FTE)		(12)		(14)		(14)

1/ Includes $455,000 of advance funding.

OVERVIEW

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) serves as the focus for the Federal government's efforts to reduce the enormous health, social and economic consequences of alcohol abuse and alcoholism within the United States. It is estimated that 10 percent of adult Americans are either alcoholic or have serious alcohol-related problems. Alcohol abuse is a major cause of diseases of the liver and pancreas; is a direct contributor to many other diseases including several types of cancer, heart disease, and neurological disorders; and plays a significant role in injuries, homicides, and suicides. A minimum of 3 out of 100 deaths in the United States can be attributed to alcohol-related causes. The economic cost of alcohol abuse and alcoholism, including lost workdays and income, was estimated at $116 billion in 1983.

The prevention of alcohol problems and the effective treatment of afflicted individuals has enormous potential for reducing illness and death and for improving the quality of life for millions of Americans. NIAAA, since its establishment in 1971, has been committed to the development of a knowledge base which can be used to improve the treatment and prevention of alcohol abuse and alcoholism. NIAAA's research program encompasses a wide range of research in the biomedical and behavioral sciences. In support of its goals, NIAAA maintains intramural research facilities and promotes a wide range of extramural research efforts through grants, contracts, and cooperative agreements.

Funding for NIAAA in 1990, which includes funds provided by the 1990 Drug Supplement, is enabling the Institute to sustain its wide array of research endeavors. Investigator-initiated research continues to be the Institute's highest priority. These investigator-initiated projects are the most effective means of support for the innovative scientific inquiry necessary to build the knowledge base for alcohol-related research. New research centers concerning alcohol abuse among children and adolescents, and treatment matching will be undertaken as well as an expansion of the genetic research cooperative agreement. NIAAA is also supporting an expansion of the Homeless Demonstration program in 1990.

Research advances in understanding the nature of alcoholism and improving the methods of prevention and treatment are being integrated into the Nation's health care system. NIAAA's future research initiatives will continue to play a critical part in shaping the eventual success in meeting the public health challenges of alcohol abuse and alcoholism.

A. Research

Authorizing Legislation - Sections 301, 487, 501, and 513(a) of the Public Health Service Act.

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$145,892,000	$153,224,000	+$7,332,000

1991 Authorization	Indefinite

Purpose and Method of Operation

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) is the preeminent Federal agency for research focused on improving the treatment and prevention of alcoholism and alcohol-related problems. Alcohol abuse and alcoholism, like other disorders, can be conquered by understanding the basic mechanisms involved, and applying this information to research on clinical practice. Toward this end, the Institute supports a range of extramural and intramural research projects. The extramural research program awards grants to scientists in academic settings, hospitals, and other independent organizations. In addition, NIAAA maintains an intramural program of biological, epidemiological and clinical research. NIAAA supports cooperative agreements and contracts for studies in areas of special need and for dissemination of scientific findings and research results. Training in biomedical and behavioral research is supported through grant awards to training institutions and fellowships to individual trainees.

Funding levels for the past five fiscal years were as follows:

1986	$ 64,991,000
1987	$ 83,437,000
1988	$ 90,907,000
1989	$119,509,000
1990	$145,892,000

The following table provides a program distribution:

Research by Program Distribution

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Extramural Research:			
Genetics & Molecular Biology	$12,729,000	$15,618,000	$16,320,000
Biochemistry and Metabolism	9,439,000	11,582,000	12,103,000
Neurosciences	19,597,000	24,044,000	25,125,000
Biological and Behavioral Determinants	8,754,000	10,741,000	11,224,000
Safety and Trauma	3,509,000	4,306,000	4,500,000
Alcohol and Pregnancy	7,118,000	8,734,000	9,127,000
Alcohol-Related Medical Disorders	9,584,000	11,760,000	12,289,000
Incidence and Prevalence	9,232,000	11,328,000	11,838,000
Treatment	7,482,000	9,180,000	9,593,000
Prevention	7,302,000	8,960,000	9,363,000
Subtotal	94,746,000	116,253,000	121,482,000
Intramural Research	15,142,000	18,525,000	19,525,000
Research Management & Support	9,621,000	11,114,000	12,217,000
Total, Research	119,509,000	145,892,000	153,224,000

Rationale for the Budget Request

The FY 1991 request is $153.2 million, an increase of $7.3 million over the comparable FY 1990 estimate of $145.9 million. Within the request, HIV/AIDS funding would be $9.2 million, an increase of $1.0 million over the FY 1990 level of $8.2 million.

The request would support 462 total research project grants, a decrease of 5 grants from the FY 1990 level. Of the total number supported, 81 would be competing research project grants, 109 less than FY 1990 level of 190 competing awards. Although competing research project grants would require downward negotiations of 10.4 percent from Council-approved levels, noncompeting continuations would be fully funded. The award rate in the FY 1991 request would be 19.9 percent as compared to an award rate of 48.2 percent in FY 1990.

The FY 1991 request would support 14 research centers, the same number as in FY 1990. Downward negotiations of 5.9 percent would be required for research centers. The other research grants and research and development contracts would be supported at about the FY 1990 level.

The FY 1991 request would support 129 full-time equivalent research trainees, an increase of 6 trainees over the FY 1990 level. No stipend increases would be provided.

The FY 1991 request would provide $19.5 million for the intramural research program, an increase of $1.0 million over the comparable FY 1990 level. The increase would provide for built-in increases such as within grades and inflation for non-pay items.

Research management and support activity would be provided $12.2 million in the FY 1991 request, an increase of $1.1 million over the comparable FY 1990 level. This increase would provide for built-in increases.

The FY 1991 request includes 223 full-time equivalents, an increase of 5 over the FY 1990 number of 218. These 5 FTEs are part of the 12 additional FTEs provided in the FY 1990 DOT appropriation, annualized in FY 1991.

Genetics and Environment

Research has provided evidence that genetic factors contribute to alcoholism, and the interaction of genetic and environmental factors has emerged as fundamentally important in the cause of alcohol problems.

Several lines of evidence point to the involvement of genetics in drinking behaviors. Studies in the past decade found that individuals born in families with an alcoholic parent but adopted during infancy and raised by foster parents in a nonalcoholic environment tend, nevertheless, to develop the drinking behavior of their alcoholic biological parent and to be at high risk for alcoholism. Large studies of twins have assessed the relative contributions of social and genetic factors that influence the similarities in drinking patterns that have long been observed among identical twins; around 40 percent of this similarity, or concordance, was accounted for by heredity.

Research also suggests the existence of two forms of inherited predisposition to alcoholism, referred to as Type I and Type II. The two types were distinguished, in part, on the basis of alcohol abuse patterns in the biological parents, and traits associated with the two prototypic groups of alcoholics.

Type I alcoholism, which occurs in both men and women typically after age 25, is associated with anxious personality traits and rapid development of tolerance and dependence on the anti-anxiety effects of alcohol. This leads to loss of control, difficulty terminating binges once they start and organ damage following prolonged drinking. In this subtype, environmental as well as genetic factors are involved. Type II is limited to males and its onset typically is early, before age 25. In this subtype, which is associated with risk-taking, anti-social personalities, and persistent seeking of alcohol for its euphoriant effects, genetic factors appear far more important than do environmental factors in explaining onset.

Breeding studies have developed lines (strains) of animals that genetically transmit alcohol-related behaviors to their offspring. One such line, the alcohol-preferring rat (P rat), which drinks alcohol solutions compulsively to the point of chronic, deep intoxication, meets all pharmacologic criteria for an animal model of alcoholism. In comparison with an alcohol-nonpreferring (NP) rat line, P rats have been found to have several genetically based behavioral, electrophysiological, and neurochemical characteristics that exist before any exposure to alcohol and appear to be related to their alcohol-seeking behavior.

Collectively, such findings provide excellent evidence of genetic involvement in drinking behavior and risk of alcoholism, and have stimulated the search for potential genetic markers of risk, including electrophysiologic and biochemical markers.

Increased funding in 1989 has allowed the Institute to embark on a major effort aimed at identifying the gene or genes that influence susceptibility to alcoholism. The Institute is supporting a large multi-disciplinary, multi-site collaborative study, involving six extramural research study centers as well as NIAAA's intramural research program. NIAAA will have continued scientific input throughout the five year study period through a cooperative agreement. Impetus for the project has come from dramatic advances in the genetic mapping of the human genome, which permit scientists to investigate the genetic basis for complex diseases that result from the additive effects of genetic and environmental factors. The recent development of highly polymorphic DNA markers, along with powerful new techniques in mathematical analysis and computer science, makes the prospect of 'disentangling' the effect of a gene or genes for alcoholism a surmountable, albeit difficult, task. If a single gene strongly influences susceptibility to alcoholism, there is a 95 percent probability that it will be linked with a known marker locus and will thus be discernible in a linkage study.

The collaborative approach allows environmental, psychological, and genetic factors to be studied simultaneously, with the aim of finding the genes associated with alcoholism as well as markers that will help in identifying individuals at risk for alcoholism. In the study, the family histories of participating alcoholics will be reviewed, DNA in white blood cells will be obtained for analysis, and the association of potential genetic and phenotypic markers with the expression of the alcoholism within the families will be examined.

Recent advances have set the stage for an intramural molecular genetic research program to identify specific genes whose variations might determine genetic susceptibility to alcoholism. A major focus of this study are genes associated with the synthesis and functions of serotonin, a neurotransmitter that appears to be involved in Type II alcoholism, noted above, in which behavioral traits of aggression, impulsivity, and antisocial behavior are prominent. Other studies have shown, for example, that metabolic products of serotonin breakdown are abnormally low in the cerebrospinal fluid of impulsive and violence-prone individuals who have committed suicide. Low levels of these metabolites have also been found in alcohol-preferring rodents.

Subjects in this study are alcoholics and their first-degree relatives in families with a history of alcoholism. The subjects are given psychological and psychiatric evaluation to assess both their alcohol drinking patterns and the presence or absence of behavioral traits of aggression/impulsivity. Lymphocytes (a type of white blood cell) are obtained from the subjects and are cultured to obtain ample DNA and genetic protein markers for identification and detailed study of genes that may determine susceptibility to both alcoholism and aggression-impulsivity in affected subjects. Intramural investigators have developed molecular probes that can reveal details of genetic informational molecules involved in the synthesis of specific enzymes involved in serotonin metabolism. A recently developed probe for tryptophan hydroxylase, an enzyme whose activity controls the rate of serotonin synthesis, is of particular interest because it can reveal genetic variations in mechanisms for synthesizing the enzyme in alcoholism-prone humans. Another genetic probe developed by intramural investigators has allowed identification and localization of a gene that appears to control alcohol intake in alcohol-preferring mice. Both probes are being applied in the study of the human subjects to determine whether similar genetic variations exist in human alcoholics with a family history of alcoholism.

The significance of this study is its potential to relate the behavioral phenomena (compulsive drinking, aggression, impulsivity) with molecular variations in the genes.

Another promising biological marker being investigated by intramural scientists is the enzyme, adenylate cyclase (AC). This enzyme catalyzes the production of a compound called cyclic adenosine monophosphate (cAMP), which is involved in the regulation of numerous cellular processes. The enzyme is found in the central nervous system as one component of a coupled system that also involves neurotransmitter receptors and a protein called G. The functioning of this coupled system is such that the binding of a neurotransmitter to its receptor causes a conformational change in the G protein, and this in turn regulates the activity of AC in its production of cAMP.

Previous intramural studies have found that AC activity in the coupled system can be stimulated by fluoride and certain other substances but that stimulation by these agents (called agonists) is lower in alcoholics than in nonalcoholics. The persistence of this effect in alcoholics suggested that it might be a genetic marker of predisposition to alcoholism. This possibility was strengthened by a later study in which the effect was found frequently in families with a history of alcoholism cases spanning two or more generations. Other intramural studies have focused on the molecular mechanisms involved in the reduced effectiveness of fluoride as an AC stimulant in alcoholics. The evidence so far indicates that fluoride and other agonists act on a type of G protein called G_s and that the impairment evidently is due to a structural defect in the G_s molecule. Studies are now underway to compare fluoride-stimulated AC activity in sons of alcoholics and sons of nonalcoholics, in twins (to assess heritability of the phenomenon), and in families with and without a history of alcoholism.

The enzyme monoamine oxidase (MAO) also may be a potential marker of genetic susceptibility to alcoholism that, interestingly, is associated with familial risk of alcoholism.

Several studies have now confirmed that the P3 wave, a voltage in the brain that is evoked by certain mental tasks, is reduced in young, high-risk but alcohol-naive sons of alcoholics, just as it is in abstinent alcoholics. The existence of this phenomenon in high-risk individuals, both before and after active alcoholism, indicates that it is probably a genetic marker of susceptibility to alcoholism and not a consequence of prolonged alcohol abuse.

An inefficient form of the enzyme aldehyde dehydrogenase (ALDH) continues to be the best characterized genetic enzyme variation affecting drinking behavior. Possession of the gene for this form of ALDH can lead to distressing symptoms of the alcohol flush reaction, which is caused by acetaldehyde accumulation, even after consumption of only small amounts of alcohol. The prevalence of this enzyme variant in certain Asian populations may help explain their low alcoholism rates. That the gene for this variant is much less prevalent among Japanese alcoholics than in the general Japanese population (which has a relatively low alcoholism rate) suggests that ALDH constitutes a genetically derived protective factor. The specific molecular alteration that accounts for the metabolic inefficiency of the variant form of ALDH was recently identified.

Across populations, people vary considerably in their drinking behavior and in their sensitivity to alcohol's effects. This variation is of great interest because studies indicate that the development of alcoholism is influenced by both genetic and environmental factors. The relative contributions of genetic and environmental factors vary from individual to individual and, as noted above, now are associated with subtypes of the disease.

Advances in classifying alcoholism subtypes, identifying biological markers of susceptibility to alcoholism, linking alcoholism to specific genes, and determining the mechanisms by which genetic and environmental factors interact to produce alcoholism are expected to accelerate our understanding of the biological and psychosocial roots of this common and costly disease. The ultimate benefit of this research is greatly improved strategies for treatment, early intervention, and prevention strategies that will include preventive counseling for at-risk individuals.

Biochemistry, Metabolism, Effects on Organs

Four distinct alcohol-metabolizing enzyme systems have been identified: the alcohol dehydrogenase (ADH) system, the microsomal ethanol oxidizing system (MEOS), the catalase system, and the fatty acid ethyl ester synthase (FAEES) system. Although molecular mechanisms are different in the ADH, MEOS, and catalase pathways, the first metabolic product in all three systems is acetaldehyde. Acetaldehyde at high concentrations can be toxic, but it is converted to acetate and to successively less toxic products by other enzyme systems. Constituent elements of alcohol are eventually eliminated from the body as carbon dioxide and water.

Because acetate is also produced by the metabolism of normal nutrients such as carbohydrates and fats, it has long been assumed that acetate derived from alcohol is a benign detoxification product and plays no role in the organ-damaging effects of alcohol abuse. However, data from an ongoing intramural research project indicate that this is not the case, that alcohol metabolism at the rate commonly found in alcoholics can produce acetate concentrations in the blood that are as much as 10 times higher than normal. At those levels, intramural researchers have found, acetate has effects that are potentially quite damaging to cells.

Intramural scientists have found that the most striking effect of high blood acetate levels is a large and very rapid flow of calcium ions from the blood into the cells of the liver, specifically into subcellular structures called mitochondria, where it is deposited as a highly insoluble salt in combination with phosphate. This calcium flow is so massive that the level of calcium in the blood would drop to zero if it were not for the fact that blood calcium is quickly replenished by mobilization of additional calcium from bone. No other metabolite has ever been found to produce such a large movement of calcium.

This is a potentially significant discovery that could help explain how alcohol abuse can cause organ damage. For example, these calcium movements from the blood to the liver and from the bones to the blood could be involved in the osteoporosis (a weakening of bone caused by loss of calcium and other minerals) that is frequently seen in alcoholics. Furthermore, it has long been observed that intracellular accumulation of calcium is commonly associated with many kinds of cellular injuries. For example, calcium deposits in blood vessel walls are found in certain vascular diseases. Likewise, calcium deposits are commonly found in breast carcinoma (their visibility with x-rays is used diagnostically). They are also found in disorders such as cirrhosis in which normal tissue is replaced by scar tissue. There is evidence that acetate may be involved in the scarring process itself. For example, there have been clinical literature reports of severe scarring in the abdominal lining following therapeutic abdominal infusion of solutions to which acetate had been added as a buffer.

Intramural scientists are now investigating possible mechanisms linking acetate, calcium deposition, and organ damage. Understanding the mechanisms involved could lead to effective clinical interventions to ameliorate such damage in alcoholics.

At lower blood levels, the ADH system accounts for most alcohol elimination. ADH is especially abundant in the liver, where most alcohol metabolism occurs, and is the longest studied and best understood pathway for alcohol metabolism. Several genetic variants of the ADH molecule have been identified in humans and animals. Since these variants have different efficiencies in converting alcohol to acetaldehyde, it is possible that genetically based differences in ADH composition could help explain individual differences in the rate of alcohol removal and in susceptibility to the physiological and pathological effects of alcohol.

There is growing evidence that the MEOS becomes a significant route of alcohol elimination at higher blood alcohol levels or after chronic alcohol abuse. The MEOS is stimulated by the chronic presence of alcohol, and there is evidence that its induction is responsible for the high alcohol metabolism rates (metabolic tolerance) seen in alcoholics. The MEOS has a high affinity for several other alien substances besides alcohol. For example, it can increase the toxic side effects of medications such as acetaminophen, a common nonprescription analgesic. The MEOS also can adversely affect several naturally occurring substances in the body; its capacity to deplete the liver's stores of vitamin A may be one reason vitamin A deficiency is common in alcoholics.

The FAEES system has only recently come to be regarded as potentially significant by alcohol researchers. The product of this system is not acetaldehyde but fatty acid ethyl esters, which are formed by the chemical linking of alcohol molecules and fatty acid molecules. Although the existence of an enzyme for this reaction has been known for many years, it was recently discovered that acute intoxication causes fatty acid ethyl ester levels to be significantly elevated in organs most commonly injured by alcohol, including the pancreas and heart. Studies are now needed to verify the hypothesis that these esters are involved in alcohol-induced organ damage.

The ongoing study of alcohol metabolism will contribute to our understanding of tolerance and dependence, which are important physiological elements in alcoholism. These studies also will uncover the metabolic contributions to alcohol-related pathways in the multiple organ systems affected by alcohol, including the brain, liver, pancreas, and the cardiovascular system.

Cytokines and Alcoholic Liver Disease: Acetate in high concentration has other adverse effects besides the disruption of calcium metabolism noted above. Intramural investigators have found that acetate can stimulate monocytes (a class of white blood cells) to secrete cytokines. These are small peptides that are very potent in producing pathological effects in body systems. For example, cytokines can induce fever and decrease albumin synthesis. They can also increase the ability of platelets (blood clotting elements) to adhere to blood vessel linings, thus increasing the risk of heart attacks and strokes, to which alcoholics are especially vulnerable. A considerable body of clinical research also suggests that monocytes from patients with alcoholic liver disease excrete excessive amounts of cytokines. It has been reported, for example, that blood cytokine levels in patients with alcoholic hepatitis can be 6 to 8 times higher than normal and that dialysis with solutions containing acetate can increase cytokine levels to 12-20 times the normal level.

In a recent collaborative prospective study of alcoholics at The Johns Hopkins University, intramural scientists discovered high blood levels of a particular cytokine, called tumor necrosis factor alpha, in 13 of 23 patients with severe alcoholic hepatitis. Death occurred in these 13 patients within 2 years after discharge from the hospital. Ability or inability to abstain from alcohol after discharge appeared to have had no influence on the fatal outcome in the patients with high cytokine levels, which suggests that alcoholism had initiated some irreversible process involving excessive cytokine production in these patients.

Intramural researchers are now studying factors, including acetate, that are involved in the release of cytokines and are examining the effects of cytokines on various types of cells. The hypothesis guiding this research is that chronically high levels of acetate produced by chronic alcohol abuse might trigger an irreversible cellular process leading to increased cytokine production and consequent organ damage. Continued research to validate this hypothesis could lead to better understanding of the mechanisms involved. This in turn could lead to improved clinical management of medical consequences of alcoholism.

Neurosciences

Neuroscientists involved in alcohol research increasingly are focusing on brain mechanisms involved in alcohol intoxication, reinforcement, tolerance, and dependence. Such studies have led recently to refinement and elaboration of a longstanding theory that alcohol affects brain functioning by disrupting the lipids of nerve cell membranes, and that consequent generalized "fluidizing" of the membranes alters the activity of enzymes and other functional proteins embedded in them. Tolerance, according to the classic model, develops as the membranes adapt to the chronic presence of alcohol by altering their lipid composition to become less sensitive to its fluidizing effect. Indeed, animal studies indicate that the membrane lipid composition does change after chronic exposure to high doses of alcohol, in a manner that produces a more rigid cell membrane that should be more resistant to alcohol.

The classic membrane-fluidizing theory continues to be refined as new knowledge accumulates. An exciting, recent development is the discovery that some effects of alcohol may be mediated by specific regions of the nerve cell membrane that are particularly sensitive to alcohol. Although this sensitivity is neither specific enough nor sufficiently localized to warrant calling those areas "alcohol receptors," the discovery is directing the attention of researchers to particular functional components, such as neurotransmitter receptors, ion channels, and enzymes, that might be concentrated in those regions. Perturbation caused by alcohol might explain some low-dose effects such as euphoria, which appear to reinforce further drinking.

Recent studies indicate that genetic variations in membrane structure also may account for individual differences in sensitivity to alcohol. For example, an electron paramagnetic resonance (EPR) spectrometry study of nerve cell membranes from long-sleep (LS) and short-sleep (SS) mice (two lines that differ in sensitivity to the sedative effects of alcohol) found that membranes from the more alcohol-sensitive LS mice were more sensitive to the fluidizing effects of alcohol.

Neurochemical research is also yielding new information on the effect of alcohol on specific neurotransmitters and their receptors. Recent findings pointing to one particular receptor that appears to be involved in the acute intoxicating effects of alcohol are supported by evidence that this receptor (the NMDA receptor) is involved in memory functions through a process called long-term potentiation. In this process, changes in neuronal biochemistry and physiology perpetuate brain signals long after the stimulus that initiated them has disappeared. There is evidence that even moderate amounts of alcohol may impair learning and memory processes by altering this neurotransmitter system.

Intramural scientists have found that alcohol inhibits a flow of calcium ions through the nerve cell membrane that is normally stimulated when NMDA binds to its receptor. Since NMDA receptors are involved in the formation of neural pathways during prenatal life, current research suggests that impairment of NMDA receptor function by alcohol exposure during that period may be involved in the microanatomical abnormalities that several studies of prenatally exposed animals have shown in brain structures associated with memory and learning.

NMDA receptors are also involved in other important aspects of alcoholism. For example, they are involved in alcohol withdrawal seizures, apparently because impaired NMDA receptor function caused by chronic high alcohol exposure produces a compensatory increase in the number of NMDA receptors. Thus withdrawal seizures might be due to NMDA receptor hyperactivity when alcohol is no longer available to act as a depressant. This possibility is supported by intramural studies showing that withdrawal seizures can be reduced by administering the drug MK-801, an antagonist of the NMDA receptor.

These findings are potentially significant. Alcohol abuse can injure many body systems, but its effects on mental abilities are surely among the most tragic consequences, whether they occur in children exposed to alcohol in utero or in adults after decades of alcohol abuse. Prevention and amelioration of these consequences depends on continued research to understand the underlying neurochemical mechanisms of alcohol's effects on the brain at all stages of the life cycle.

Another active area is research on alcohol's interactions with gamma-aminobutyric acid (GABA), the brain's major inhibitory neurotransmitter. Several studies suggest that some behavioral effects of alcohol may arise from its action on inhibitory brain systems that have receptors for GABA. The binding of GABA to its receptor causes a flow of chloride ions into the nerve cell, and this flow is enhanced by alcohol. Alcohol has also been shown to enhance some of the behavioral effects of GABA. Additionally, some of the intoxicating and anxiety-reducing effects of alcohol can be blocked by agents known to block the action of GABA. Finally, differences in the GABA system have been found in mouse lines selectively bred for resistance or nonresistance to the hypnotic effects of alcohol. Although there are discrepancies among individual studies, these findings suggest that the GABA neurotransmitter and receptor system may be a major site of alcohol's actions in the brain.

Some newly discovered brain neuropeptide systems appear to be involved in some of alcohol's acute effects and may be involved in genetic differences in sensitivity to the pharmacological effects of alcohol. One such system involves neurotensin and its receptors. Comparisons in animal studies have found a correlation between several brain regions and an inherited low sensitivity to alcohol. Without any alcohol administration, neurotensin administration produces a number of alcohol-like physiological and behavioral responses including hypothermia, analgesia, muscle relaxation, and decreased locomotor activity. The animal studies suggest that genetic differences in sensitivity to alcohol may be at least partly due to genetic factors that affect the number of neurotensin receptors.

Modern neuroscience techniques are providing evidence that certain neurotransmitters, receptors, and ions may be involved in mediating tolerance to alcohol and that certain neurohormones such as vasopressin may play a critical role in maintaining it. Intramural scientists have found evidence that vasopressin, a hormone produced in the pituitary gland, may play an important role in the development of alcohol tolerance and even in its perpetuation after alcohol consumption stops. Thus alcohol tolerance in mice was found to persist after alcohol was withdrawn if the animals were given injections of vasopressin or one of its analogs. Other intramural studies indicate that tolerance-related actions of vasopressin are mediated by specific receptors for the hormone in certain areas of the brain and that the binding of vasopressin by these receptors influences the release of a class of neurotransmitters called catecholamines. Agents that cause depletion of a catecholamine known as norepinephrine appear to inhibit the tolerance-perpetuating effects of vasopressin. Thus at least part of vasopressin's role in tolerance may involve its effects on the release of norepinephrine and other catecholamine neurotransmitters.

Another effect of vasopressin binding discovered recently by intramural researchers is its stimulating effect on protein synthesis mechanisms in the brain, possibly by activation of a specific gene called c-fos. Intramural studies suggest that products of this gene may be involved in functions associated with learning, memory, and conditioning, which are also known to be involved in alcohol tolerance. A role for conditioned learning in alcohol tolerance is indicated by animal studies showing that tolerance to alcohol is greater when it is administered in a familiar setting than when it is administered in a novel setting.

Collectively these findings suggest that vasopressin plays an important role in the development of alcohol tolerance by influencing brain biochemical systems involved in neurotransmission and, ultimately, learning and memory. Further research on the mechanisms of tolerance development and the role of vasopressin in those mechanisms is critically important for an understanding of how alcoholism develops.

Detecting Brain Damage in Alcoholics: It is now well established through autopsy studies, psychological testing, and radiographic imaging techniques such as computerized axial tomography (CAT) scanning, that chronic alcohol abuse can cause both reversible and irreversible brain damage. Although these techniques can demonstrate brain damage in alcoholics, their relative insensitivity limits their usefulness to advanced stages of such damage. They cannot detect subtle early-stage metabolic abnormalities in the brain that must precede the development of measurable psychological and morphological changes. A sensitive method for assessing metabolic changes in the brain is badly needed not only for research to understand the underlying mechanisms of brain damage from alcohol, but also for clinical monitoring of recovering brain functions in alcoholics undergoing withdrawal.

A promising new approach to brain imaging--nuclear magnetic resonance (NMR) spectroscopy--is being explored by intramural scientists for application in alcohol studies. NMR spectroscopy is a noninvasive, highly sensitive, and nonradioactive method of measuring blood flow in specific regions of the brain. Since local blood flow varies according to a tissue's demands for metabolic energy, measurement of blood flow with NMR spectroscopy can provide an indirect indicator of the metabolic activity of brain tissue. It can also be combined with other techniques to determine the rate of oxygen and glucose consumption in specific brain areas.

Tests with animals indicate that NMR spectroscopy is feasible for measuring metabolic activity within the brain. Intramural scientists are now refining the method for eventual clinical application in the treatment of alcoholics. Ability to monitor brain metabolism with this sophisticated and highly sensitive method could be very useful both for assessing new therapies and for tailoring treatment to the responses of individual patients.

Knowledge about the actions of alcohol on the brain is essential to understanding the physiology underlying alcoholism, which is a disease expressed in behavior. Advances in this arena are enabling us to answer fundamental questions in alcohol abuse and alcoholism such as the reasons that consumption of alcohol is rewarding, or reinforcing, and that the reinforcement is such that some individuals continue to consume alcohol despite knowledge of its detrimental consequences on their health, lives, and families.

Safety and Trauma

Injuries are the leading cause of death between the ages of 1 and 44 years, and alcohol is implicated frequently. Alcohol intoxication is associated with 40 to 50 percent of traffic fatalities, 25 to 35 percent of nonfatal motor vehicle injuries, about two-thirds of fires and burns, about half of hypothermia and frostbite cases, and about 20 percent of completed suicides. Alcohol has been estimated to be present in at least 40 percent of falls and nearly 50 percent of homicides (victim or perpetrator). A recent review of emergency room cases found that 20 to 37 percent of all such cases involved alcohol use. It has also been estimated that 20 to 25 percent of persons hospitalized with an injury have a drinking problem or are alcoholic.

Alcohol increases both the risk of injury and the severity of injury when it occurs; if a drinker and a nondrinker experience the same trauma situation, the drinker is likely to be hurt more seriously. The reasons for the injury-intensifying effects of alcohol are not yet known with certainty, but the association has been observed in several studies.

Other complications caused by alcohol in injury cases arise from its confounding effects on diagnosis. For example, emergency room physicians can mistake signs of intoxication such as slurred speech or memory lapse as signs of brain injury. Conversely, obvious intoxication creates a risk of attributing most or all signs and symptoms to the intoxication and thus overlooking injuries that are life threatening. Alcohol can also complicate the management and treatment of trauma patients.

These complications and the strong association between alcohol and trauma highlight the importance of continued research in this area. Increased understanding of the role of alcohol in various types of injuries will lead to more effective prevention strategies. Also, increasing physician awareness and improving physician training about the role of alcohol will contribute significantly to the overall quality of medical treatment.

Alcohol and Pregnancy

Research has firmly established that alcohol consumption during pregnancy can cause birth defects. The severity of the defects is dose dependent, ranging from extensive impairments of the fetal alcohol syndrome (FAS), when drinking is heavy and continuous, to subtle behavioral and cognitive deficits at lower consumption levels. An often cited estimate of FAS incidence is 1 to 3 cases per 1,000 live births, or about 3,600 to 10,000 new cases in the United States each year. Thus, FAS is one of the leading known causes of mental retardation. The incidence of cases with partial manifestations of the syndrome (termed fetal alcohol effects, or FAE) is estimated to be about three times greater.

The persistence of alcohol-induced birth defects is an area of major concern. In a recent followup study, FAS children were examined at various times after their original diagnosis. While significant improvements were found in some of the defining features such as craniofacial disfigurement, cognitive deficiencies were remarkably persistent.

Recent evidence indicates that risk for giving birth to FAS infants may be modified by other factors, including genetics and maternal variables. For example, epidemiological studies have demonstrated a greater susceptibility of blacks to the harmful effects of prenatal alcohol exposure. While research is continuing to clarify factors that may modify the risk of alcohol-related birth defects, it is clear from many studies around the world that no races or ethnic groups are immune. Researchers are working to develop better techniques for identifying pregnant women who are at high risk of continuing alcohol abuse for intervention. Recent studies indicate that the best predictors of continued drinking throughout pregnancy are the length of drinking history, tolerance to alcohol, and a history of alcohol-related illness.

An urgent area of study is alcohol's role as a cofactor in the transmission of HIV/AIDS from the mother to the fetus. Recent findings indicate that maternal alcohol consumption has a profound effect on the development of the fetal immune system. Ethanol inhibits transport of antibodies across placenta, suppresses proliferation and maturation of thymocytes, and decreases the offsprings' ability to resist infections. The latter effect has been also shown for paternal alcohol consumption. Further research in this area is needed.

The effects of low-level or moderate drinking on prenatal development are of considerable concern because this pattern of drinking is so prevalent. In light of evidence that alcohol's effects on development lie on a dose-dependent continuum, it is important to assess developmental patterns in children in relation to a wide range of prenatal exposure levels. The Institute is continuing to support three longitudinal studies of the relationship between maternal alcohol consumption during pregnancy and developmental outcomes in offspring. Subtle neurobehavioral effects have been observed at ages 4 and 7 in a large group of children who have been followed since birth and whose mothers drank moderately during pregnancy.

The Institute continues to fund a number of laboratory studies of alcohol's effects on prenatal and postnatal development. In recent years, studies to determine why and how alcohol adversely affects the fetus have uncovered a number of mechanisms that likely contribute in differing degrees to FAS. These include alcohol-induced placental dysfunction, direct alcohol and acetaldehyde toxicity, fetal hypoxia, and the role of potent naturally occurring hormone-like substances called prostaglandins. Continued research is required to answer a number of pressing questions: What is the minimal dose of alcohol which portends a risk to the fetus; are there therapeutic interventions which can aid recovery from injury; and what are the most effective techniques to minimize alcohol use during pregnancy, particularly early in the first trimester, a critical period of birth defects, when a woman may not yet be aware of her pregnancy?

Alcohol-Related Medical Disorders

The liver, brain, pancreas, and endocrine glands are particularly vulnerable to damage from alcohol, although virtually all organ systems are affected by it either directly or indirectly. Nevertheless, individuals differ in their susceptibility to adverse medical consequences from alcohol abuse, for genetic and other reasons.

Fatty liver, hepatitis, and cirrhosis have long been associated with alcohol abuse and for many years were thought to be stages on a continuum of alcohol-induced liver injury--with fatty liver leading to alcoholic hepatitis, and alcoholic hepatitis leading to cirrhosis, an irreversible disorder with high mortality. Evidence from human and animal studies now makes the continuum theory untenable. Alcoholic cirrhosis can develop without evidence of previous alcoholic hepatitis, and histological studies have shown that all three conditions can exist simultaneously in the same individual. The co-occurrence of alcoholic hepatitis and alcoholic cirrhosis is particularly ominous; there is evidence that this combination produces dramatically higher 1-year and 5-year mortality than is seen with cirrhosis alone.

About 10 to 20 percent of heavy drinkers develop diagnosable cirrhosis, although autopsy studies suggest that 40 percent of cirrhosis is not detected during life. While the risk of developing cirrhosis increases with both the level and duration of alcohol abuse, the degree and duration of excessive alcohol consumption needed to produce cirrhosis is uncertain. Nevertheless, not all alcohol abusers and alcoholics develop cirrhosis, and it is likely that genetic factors affect susceptibility. Recombinant DNA techniques were recently used for the first time to examine this possibility. A specific variant of the type I collagen gene in white blood cells was found to be associated with cirrhosis in a population of alcoholics. The same test now needs to be applied in studies of families to see if possession of the variant gene is linked to the risk of cirrhosis. Demonstration of that linkage would strongly support a role for genetic predisposition in alcoholic cirrhosis and enhance preventive opportunities.

The mechanisms of alcohol-induced liver damage continue to receive intense study. A classic belief that these disorders were primarily caused by malnutrition associated with alcoholism was refuted by the demonstration that alcohol toxicity itself is responsible and that liver damage can occur in well nourished alcohol abusers. However, more recent studies indicate that nutritional deficiencies common in alcoholics may play an important contributing role by damaging the liver's capacity to repair the effects of alcohol, thereby making it more vulnerable to toxicity from alcohol and its metabolites.

Heavy alcohol consumption is a leading cause of chronic pancreatitis, an extremely painful condition. Pain can recur even in patients who permanently cease drinking. The prolonged inflammatory damage to pancreatic tissue often leads to digestive disorders and diabetes. Little is known about the basic processes involved in alcohol-induced chronic pancreatitis, largely because a suitable animal model for it does not exist. However, evidence suggests that the disorder may arise from a combination of alcohol stimulation of pancreatic secretions, obstruction of the flow of those secretions from the pancreas, and premature conversion of pancreatic digestive enzyme precursors (zymogens) into active enzymes within the pancreas, with the result that they begin to digest the pancreatic tissue itself.

Heavy alcohol consumption is a well documented cause of brain damage: 50 to 70 percent of detoxified alcoholics have been found to show evidence of brain dysfunction, and alcoholism is second only to Alzheimer's disease as a cause of chronic organic brain disorders expressed as dementia. Both general brain atrophy and loss of brain cells in structures associated with memory loss can often be seen in post-mortem examination of alcoholics. Atrophy can also be seen in brain imaging studies of living alcoholics, and the damage correlates significantly with lifetime alcohol consumption. Recent evidence suggests that toxins produced as a consequence of alcoholic liver disease may be involved in some of the neurological impairments seen in alcoholics. Several studies indicate that some brain dysfunctions of alcoholism can be reversed by abstinence, but memory and learning deficits are not among them.

Recent findings are directed renewed attention to the relationship between alcoholic brain damage and behavior. A recent autopsy study of 200 alcoholics found that 131 had neuropathology of a kind found in the Wernicke-Korsakoff syndrome, an irreversible condition of profound amnesia and loss of learning ability seen only after prolonged severe alcoholism. Yet only 20 percent of those 131 alcoholics had shown any signs of the syndrome when they were alive.

There is preliminary evidence that alcohol alters components of the immune system that can play a role in facilitating HIV infection or its progression to AIDS. Specifically, preliminary studies have shown that alcohol inhibits activity of one of the blood components (Tumor Necrosis Factor) that may play a role in the host defense against HIV and tuberculosis infections, and malignancy; and inhibits the cellular and humoral components of the immune response (the natural killer cells, the function of helper and suppressor T-lymphocytes and antibody-secreting B-lymphocytes). Research in these areas is crucial in understanding alcohol's effects on host resistance to HIV and opportunistic infections and progression of AIDS after primary infection.

An emerging area is multidisciplinary research on interactions between the nervous, endocrine and immune systems. Recent preliminary findings indicate that some effects of alcohol on the immune system are associated with neurohormonal changes (corticosteroids, CRF, ACTH, Nerve Growth Factor, norepinephrine). Progress in this new area may contribute to the understanding of immunomodulating effects of alcohol through neuroendocrine regulation.

Alcoholism and Affective Disorders: The relationship between alcoholism and affective disorders such as depression, suicidal behavior, anxiety, and panic, which are common among alcoholics, is unclear. There has been uncertainty whether this association is due to chance, to alcoholism arising from the abuse of alcohol as self-medication for an underlying affective disorder, or to the toxic effects of chronic high alcohol exposure. As part of an investigation of this association, an intramural study comparing panic disorders in alcoholics and nonalcoholics found that the alcoholics were much less sensitive to sodium lactate, an agent that can trigger panic attacks in susceptible individuals.

The great difference between the alcoholics and the nonalcoholics in responsiveness to sodium lactate suggests that the biochemical mechanisms of panic attacks may differ in the two groups. In a related intramural study in which alcoholics with and without panic disorder were compared, it was found that those with panic disorder had higher levels of beta-endorphin in their cerebrospinal fluid. Endorphins are natural neurochemicals that have an opiate-like action in the central nervous system. The significance of higher beta-endorphin levels in panic-prone alcoholics is now being investigated by intramural researchers. Continued research to understand these biochemical differences could lead to more effective pharmacologic interventions for affective disorders associated with alcoholism.

Incidence and Prevalence

The Institute has developed a comprehensive epidemiological surveillance system to gather and analyze data related to the medical, psychological, and environmental aspects of alcohol use, abuse, dependence and consequences. This system, by analyzing the trends and distributions of alcohol-related problems in the United States, can provide insights into the determinants of alcohol abuse and alcoholism.

The NIAAA has not established its own independent system for data collection; rather, the Institute's surveillance system makes use of other agencies' existing data collection systems. Cooperating agencies include the National Center for Health Statistics, Centers for Disease Control, Department of Transportation, Bureau of Labor Statistics, and the National Institute on Drug Abuse. Data from these sources are used to estimate the magnitude of alcohol problems, national drinking patterns and trends, consequences of alcohol abuse including the role of alcohol in other health problems, and risk factors associated with alcohol-related morbidity and mortality.

All sources indicate that a large number of Americans suffer adverse consequences from alcohol use. For example, a recent national household survey of persons aged 18 years and older found that 10 percent were adversely affected by alcohol, either as problem drinkers (4 percent) or as alcoholics (6 percent).

Given preliminary research data indicating that alcohol consumption is a cofactor in HIV infection and its progression to AIDS, NIAAA supports cross-sectional studies on the associations between alcohol/drug use and high risk sexual behavior, rates of HIV seroconversion and the development and clinical course of AIDS. These studies involve various high risk populations, including homosexual and bisexual men and minority groups, in different geographic areas.

While alcohol plays a significant role in the incidence and prevalence of a number of other diseases, alcoholism and alcohol-related problems in patients are frequently overlooked by physicians. A recent comprehensive screening of newly admitted hospital patients found that the overall prevalence of alcoholism was 25 percent. However, striking variations in detected prevalence, by department and by physician specialty, indicate a need to improve physicians' training in the diagnosis of alcohol-related problems. Toward this end, the Institute is supporting a program of faculty development for health professional schools. The goal of this program is to train faculty in these schools about substance abuse so that the future generation of physicians and nurses will be trained to diagnose and implement the initial steps for the treatment of alcohol and other drug-related problems.

A gradual but steady decline in U.S. per capita alcohol consumption that began in 1981 is continuing. Current per capita consumption is at the lowest level since 1970. In recent years, in the United States and in several other countries, there has been a significant decline in mortality from cirrhosis of the liver, the main chronic health hazard associated with alcoholism; still, cirrhosis is the 9th leading cause of death in this country.

The frequency and quantity of alcohol consumption, as well as of alcohol-related medical disorders, have always been greater among men than among women. Although some recent studies indicate an increase in the proportion of heavy drinkers among younger women, overall drinking patterns in the general female population appear to have remained fairly steady for several years. A perceived trend toward a general convergence of male and female drinking patterns is not well supported by objective evidence and may simply reflect decreased reluctance of contemporary women with drinking problems to "go public" with them and enter treatment.

Although a gradual downward trend in alcohol use by high school seniors has occurred throughout the 1980s, alcohol use in this group is still disturbingly high. Ninety-two percent of seniors in 1988 had tried alcohol, two-thirds were current drinkers, more than one-third drank heavily on occasion, and nearly one-third reported that most or all of their friends got drunk at least once a week.

Continued surveillance of patterns in alcohol use and alcohol-related problems is an integral component of the Institute's overall program. The benefits of surveillance include assessment of the magnitude of problems and better targeting of preventive and remedial measures and resources. Furthermore, prevention and treatment efforts designed to address unique problems of population subgroups can also be developed.

Treatment

More than 1.4 million people with severe alcohol problems were treated in the United States in fiscal year 1987, according to findings of the National Drug and Alcohol Treatment Unit Survey, which is jointly sponsored by the National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse. This figure does not include the large number of alcoholics who receive help from groups such as Alcoholics Anonymous.

The Institute continues to emphasize research to improve patient-treatment matching, i.e., the ability to assign clients to facilities, treatment methods, and treatment providers that match their psychological and behavioral characteristics and the severity of their alcohol dependence. One of the Institute's major new initiatives is a cooperative grant program focused on treatment matching studies at multiple sites using large study populations. This approach permits simultaneous testing of various treatment strategies, exploration of interactions between strategies, and standardization of techniques among the participating centers. In turn, these features will allow for more sophisticated analyses than were previously possible and will enhance the generalizability of study results. This initiative will also provide an opportunity for public and private treatment programs to work collaboratively with experienced university-affiliated treatment outcome research experts in investigating promising patient-treatment matching strategies.

Pharmacological treatment for alcoholics is also a significant and promising area in treatment research. Research is focusing on the identification and development of: agents for managing alcohol withdrawal; experimental drugs that induce sobriety in intoxicated individuals; agents that decrease drinking by treating any associated psychopathology; agents that relieve craving; and agents that attenuate problem drinking behavior. The development of agents that decrease the desire to drink has considerable appeal, and research in this area seems likely to increase with the rapid growth of knowledge about brain neurochemistry. The Institute's efforts in this area will be coordinated with the recently expanded Medications Development program in the National Institute on Drug Abuse.

Recent psychopharmacologic research has shown that certain agents have actions that may be useful as adjuncts to the standard alcoholism treatment. Over the next decade, drugs that interfere with the reinforcing properties of alcohol and block craving may become candidates for investigation. The development of objective markers of alcohol consumption, one of several current priorities in alcoholism treatment research, will have a significant impact since objective markers will allow researchers more easily and reliably to determine alcohol-drinking behavior. In this context, it is important to note that behavioral treatment methods will likely prove very important for improving compliance with promising new or future pharmacological agents so that the full benefit of those medications will be realized.

NIAAA intramural scientists have been conducting studies to characterize memory deficits and to develop possible pharmacologic interventions for Korsakoff patients. One result of these studies is the discovery that the drug fluvoxamine can improve certain aspects of memory in such patients. Knowledge of this drug's mechanism of action points to a possible underlying mechanism for the memory loss associated with Korsakoff's psychosis, or alcohol amnestic syndrome, which is characterized by profound memory loss, while leaving other intellectual functions relatively unimpaired. Fluvoxamine is a serotonin-reuptake inhibitor; that is, it diminishes the reuptake of the neurotransmitter serotonin by brain cells, thus raising serotonin levels needed for communication between neurons. The finding that the drug can improve memory functions in Korsakoff patients suggests that serotonin deficiency may play a role in the severe amnesia that characterizes this syndrome.

Treatment research--particularly, the Institute's priorities of treatment-matching and pharmacological studies--holds future promise for the development of standard, effective treatment modalities that would become part of the nationwide health care delivery system for the portion of the population who suffer the life-damaging effects of alcohol abuse.

Prevention

Warning labels on commodities that are hazardous to health may be useful for raising public awareness of the risks involved in using such products. Enactment of Public Law 100-690, requiring health warning labels on alcoholic beverage containers beginning in November 1989, has created an opportunity to assess the impact of such labels on public knowledge, attitudes, and behavior and on the frequency of alcohol-related problems. Accordingly, the Institute in 1989 invited submission of research grant proposals to measure the impact of alcohol warning labels. Comparisons of drinking behaviors before and after labeling and tests of the effectiveness of different types of labels are being made.

Research has shown that the price of alcoholic beverages has an impact on drinking behavior and on the adverse consequences of drinking. Analysis of data from States with different tax rates suggests that higher alcohol prices can significantly reduce chronic heavy drinking and fatal automobile crashes. Price also has an impact on drinking and drinking-related problems among youth. A recent study examined the impact of beer prices and projected that higher real prices for beer would reduce the incidence of heavy and frequent drinking among youth. A separate study suggested that beer price increases would decrease highway mortality involving young drivers.

Research also has shown that minimum drinking age laws have an impact on traffic accidents. Data from the National Highway Traffic Safety Administration show that between 1982 and 1986, the greatest reduction in fatal traffic accidents involving drunk drivers was among drivers aged 16 to 20 in States that increased their minimum drinking age to 21. This group showed a 30 percent reduction in fatal crashes involving intoxicated drivers.

Despite evidence that intensified law enforcement programs to deter drinking and driving can be effective in reducing the number of alcohol-related vehicular crashes, especially when they are made conspicuous by mass media coverage, the impact of such measures has been diminished by a decline in media interest and reduced priority on the part of law enforcement agencies. The short-term positive effects such campaigns have had indicate a need for improved implementation of these approaches and further research on their long-term impact.

Programs to train alcohol servers to recognize signs of overindulgence, to deal with patrons who are intoxicated or approaching their limits, and to slow down customers' alcohol consumption are a promising approach to preventing alcohol problems. Such programs are relatively new, but early published evaluations are encouraging. One study found that training servers to monitor alcohol consumption resulted in a 50 percent lower probability of patrons becoming intoxicated.

Preliminary data suggest an association between alcohol use and the frequency of some forms of high risk sexual behavior. Studies now are examining the role of alcohol in facilitating behaviors which increase the risk of exposure to HIV. These studies might contribute to the development of strategies for prevention of unsafe sexual practices and IV drug use.

A key element in the approach to prevention of alcohol problems in recent years is the recognition that the strategies need to affect the environment as well as individual behavior. A variety of prevention methods is being used, including public information and education, increased law enforcement, changes in the contexts of drinking, and limitations on the availability of alcoholic beverages. Prevention of alcohol problems is a priority matter, and the Institute remains committed to the support of research to assess and refine existing prevention approaches and to develop new strategies. Assessment of community prevention studies that employ more than one prevention strategy simultaneously, e.g., school-based programs and media educational efforts, is an approach that will aid the Institute's prevention efforts.

Research Training

Progress in understanding and dealing with the adverse personal and social effects of alcohol abuse requires an adequate number of well trained alcohol researchers. The NIAAA supports training in a wide range of relevant basic sciences including genetics, molecular biology, neurosciences, and behavioral sciences. It also supports training in applied research on the treatment and prevention of alcohol abuse.

Training is supported at both the predoctoral and postdoctoral levels, but currently the Institute places greater emphasis on postdoctoral training as the most cost-effective way to meet the needs of the field. Priority is placed on advanced training for individuals who can bring an interdisciplinary perspective to alcohol research and for those capable of applying increasingly sophisticated instrumentation and techniques to the study of alcoholism. Under the National Research Fellowship Award (NRSA) program, training support is provided through fellowship awards to individual scholars and by training grants to institutions. ADAMHA's Minority Access to Research Careers (MARC) program is also used by the Institute to encourage minority participation in alcohol research.

INTRAMURAL RESEARCH

The NIAAA Intramural Research Program (IRP) conducts a comprehensive research program dealing with the causes, diagnosis, treatment, and prevention of alcohol abuse and alcoholism, as well as the biological and psychosocial factors that determine human behavior and development. The intramural research program supports approximately 100 investigators and operates 3 laboratories and clinical branches on the campus of the National Institutes of Health and at the Flow Laboratory Building located in Rockville, Maryland. Approximately 60 research projects in the basic neurosciences, clinical pharmacology, and behavioral sciences are conducted in these facilities each year. Significant accomplishments and opportunities in the NIAAA intramural research program are incorporated in the research narrative justification under the appropriate headings.

Summary of Changes:

The FY 1991 request of $19,525,000 reflects an increase of $1,000,000 over the comparable FY 1990 level. The increases are identified as follows:

Built-in Increases	
Jan. 1990 pay annualization	+$44,000
Jan. 1991 pay increase	+172,000
Within grade increases	+70,000
Increased PHS Service & Supply Fund	+5,000
Increased NIH Management Fund costs	+249,000
Increased FERS costs	+15,000
Increased Rental Payments to GSA	+39,000
Increased Social Security (FICA)	+13,000
Increased cost of non-pay items including laboratory materials and other supplies	+167,000
Annualization of 2 new positions in 1990	+74,000
Restoration of program cuts used to absorb Jan. 1990 pay raise	+133,000
One extra day of pay	+19,000
Total Increases	+1,000,000

RESEARCH MANAGEMENT AND SUPPORT

Funds allocated to the research management and support activity support overall management, planning, policy development, and coordination of the scientific and administrative functions of the Institute. Staff provide scientific direction for program announcements, support and monitor funded research projects, manage the review and award of proposals, organize conferences and related activities to promote new initiatives, develop alcohol-related policy analysis, and disseminate research results.

Accomplishments in this activity include:

- ETOH: A database system that provides records and abstracts for over 60,000 published sources concerning alcohol-related research information.
- Quickfacts: An electronic bulletin board system that provides access to alcohol-related Status field data.
- Active dissemination of research studies and scientific findings through publication of numerous papers and presentation of papers of meetings.

Salaries and other support costs are included in the request for staff who provide scientific direction and technical expertise in the development and implementation of the Institute's program as well as administrative support in areas of grant monitoring and review, planning, budget and personnel.

The Institute would continue to draw on outside experts who assist our staff in identifying research opportunities and transferring new research findings to the medical and treatment communities.

Summary of Changes:

The FY 1991 request of $12,217,000 reflects an increase of $1,103,000 over the comparable FY 1990 level. The increases are identified as follows:

Built-in Increases	
Jan. 1990 pay annualization	+$52,000
Jan. 1991 pay increase	+217,000
Within grade increases	+81,000
Increased PHS Service & Supply Fund	+18,000
Increased FTS costs	+3,000
Increased FERS costs	+17,000
Working Capital Fund transfer	+1,000
Increased Rental Payments to GSA	+28,000
Increased Social Security (FICA)	+15,000
Increased cost of non-pay items including laboratory materials and other supplies	+120,000
Annualization of 10 new positions in 1990	+372,000
Restoration of program cuts used to absorb Jan. 1990 pay raise	+156,000
One extra day of pay	+23,000
Total Increases	+1,103,000

B. Demonstrations

Authorizing Legislation - Section 513 of the Public Health Service Act.

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$16,378,000	$9,498,000 1/	-$6,880,000

1991 Authorization....................Indefinite

1/ Includes $455,000 of advance funding.

NIAAA, in consultation with NIDA, currently administers nine community-based research demonstration projects focused on homeless persons with alcohol and other drug problems. Section 613 of the Stewart B. McKinney Homeless Assistance Act (P.L. 100-628) provided a total of $9.2 million for a 2-year period, beginning in FY 1988. Most of these projects were competitively renewed for a third year under an additional appropriation of $4.5 million dollars in FY 1989.

Funding levels for the past five fiscal years were as follows:

1986	$0
1987	$9,200,000
1988	$0
1989	$4,545,000
1990	$16,378,000

The general purpose of this research demonstration program is to generate scientific knowledge that will contribute to effective interventions for homeless individuals with alcohol and/or other drug problems. Specific aims of the projects include: 1) reducing the consumption of alcohol and/or other drugs by homeless persons; 2) increasing levels of shelter and residential stability; 3) enhancing the economic and/or employment status of the target population; 4) improving the health and mental health status of the target population; and 5) increasing cooperation and linkages among service agencies in addressing the multiple needs of homeless individuals with alcohol and/or other drug problems.

The 9 projects awarded in FY 1989 are implementing an array of treatment approaches (e.g., outreach, sobering stations, detoxification, recovery and treatment, temporary shelter services, intensive case management, housing and vocational assistance, and supportive living programs) and evaluating their effectiveness with homeless subpopulations including women with children, persons with mental health and co-occurring alcohol or drug abuse problems, chronic public inebriates, and Native Americans and other minority groups.

In FY 1990, NIAAA, in consultation with NIDA, will support new research demonstrations that will build on the findings of the original projects. On the basis of evaluation research that will assess the effectiveness of a variety of treatment approaches by studying the nature of services delivered and the characteristics of the population served, effective service delivery models will be replicated. A minimum of 25 percent of each grant award will be allocated for evaluation research. Two interrelated categories of evaluation activities are planned: (1) individual project evaluations; and (2) a national evaluation. NIAAA and NIDA will support individual project evaluation designs that provide the strongest possible test of the proposed intervention(s) and, at the same time, contribute data to the national evaluation of the full research demonstration program. More specifically, applicants will be required to design an individual project evaluation that includes, at a minimum, a comparison group and the core set of standardized instruments prescribed by NIAAA. Data collected using these prescribed instruments will be submitted to NIAAA and used to develop a common data set for the national evaluation. The national evaluation effort will have three components: systematic case studies, site-level process evaluation and a cross-site analysis of client outcome.

Rationale for the Budget Request

The FY 1991 request for the Homeless Demonstration Program is $9,498,000, a decrease of $6,880,000 from the comparable FY 1990 level. The request would provide for 18 noncompeting grants with downward negotiations of about 45 percent necessitating a reduction in scope for these research demonstrations.

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IV. Treatment Outcome Research

Authorizing Legislation - Section 301 of the Public Health Service Act

1990 Estimate No.	1990 Estimate Amount	1991 Estimate No.	1991 Estimate Amount	Increase or Decrease No.	Increase or Decrease Amount
24	$7,803,000	25	$8,335,000	+1	+$532,000

1991 Authorization....................Indefinite

Purpose and Method of Operation

Treatment Outcome Research (TOR) grants have been a part of ADAMHA's research portfolio since 1974. The Anti-Drug Abuse Act of 1986, Section 1923, earmarked one percent of the amount appropriated under Section 1921 in any fiscal year to be used to "determine the most effective forms of treatment." In FY 1987 $2.3 million was made available for two years and was used to fund three two-year awards and two one-year awards in this program. Since FY 1989 these programs have been conducted under the general research authorization although Congress has continued to identify certain funds to be used for them.

Funding levels for the past five fiscal years were as follows:

1986	$0
1987	$2,310,000
1988	$0
1989	$2,282,000
1990	$7,803,000

Beginning in FY 1989, no special grant announcement was required to stimulate applications in the TOR area. NIDA and NIAAA both used a general program announcement and the normal review process for all grants addressing this area of research. Grants are funding according to priority scores, with the money appropriated for Treatment Outcome Research being used first, and the remainder of the fundable grants being paid out of the regular research allocation.

In FY 1989 the number of TOR grants paid from the two funds were:

	TOR Grants No.	TOR Grants Amount	Regular Grants No.	Regular Grants Amount
NIDA:				
Continuations	--	---	15	$4,438
Competing	4	$1,141	7	563
Total, NIDA	4	1,141	22	5,001
NIAAA:				
Continuations	--	---	14	1,087
Competing	4	1,141	7	557
Total, NIAAA	4	1,141	21	1,644
Total	8	2,282	43	6,645

Rationale for Budget Request

In keeping with the Congressional focus on the evaluation of treatment regimens and the identification of favorable outcomes, the FY 1991 request increases by 6.7 percent the funds associated with Treatment Outcome Research in the FY 1990 appropriation. This request of $8.3 million will increase from 24 to 25 the number of projects supported with these designated funds. It is important to recognize that the amount identified in the FY 1991 request for TOR is only a fraction of the amount actually spent on TOR grants within the research budgets of NIDA and NIAAA.

Increased Treatment Outcome Researcn funds support grants in areas like: treatment of adolescent drug users, matching patient needs to appropriate treatment modalities, long-term effects of drug and alcohol treatment, and approaches for aftercare and rehabilitation. A more detailed discussion of these areas of science funded are identified in the Treatment Sections of NIDA's and NIAAA's Research narrative.

V. Substance Abuse Prevention

Budget Authority by Mechanism

	1989 Actual		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount
Demonstration Program:						
High Risk Youth:						
Grants:						
Continuations...........	81	18,029,000	30	7,204,000	138	35,367,000
New.....................	30	6,238,000	123	26,611,000	18	3,945,000
Supplements	(3)	22,000	---	---	---	---
Subt, HRY Grants......	111	24,289,000	153	33,815,000	156	39,312,000
Contracts................	1	2,167,000	3	5,142,000	3	5,350,000
Total, High Risk Yth.	112	26,456,000	156	38,957,000	159	44,662,000
Pregnant Women & Infants:						
Grants:						
Continuations...........	---	---	20	4,851,000	118	31,671,000
New.....................	20	4,209,000	98	25,635,000	15	3,944,000
Subt, Preg Women Grnts	20	4,209,000	118	30,486,000	133	35,615,000
Contracts................	1	423,000	2	2,073,000	2	2,149,000
Total, Pregnant Women	21	4,632,000	120	32,559,000	135	37,764,000
Communications Program:						
Grants:						
Continuations...........	---	---	---	---	24	2,022,000
New.....................	---	---	24	1,958,000	---	---
Subt, Communic Grants.	---	---	24	1,958,000	24	2,022,000
Contracts................	2	4,510,000	7	8,332,000	7	8,797,000
Total, Comm. Prog....	2	4,510,000	31	10,290,000	31	10,819,000
Conference Grants.........	23	1,046,000	38	1,979,000	41	2,066,000
Prog. Support Contracts...	3	3,779,000	3	2,529,000	3	2,632,000
Comm Youth Activity Prog..	88	14,996,000	97	19,798,000	97	20,660,000
Community Prevention:						
Grants:						
Continuations...........	---	---	---	---	148	44,696,000
New.....................	---	---	148	42,764,000	167	50,000,000
Subt, Community Grants	---	---	148	42,764,000	315	94,696,000
Contracts................	---	---	5	6,732,000	5	6,954,000
Total, Comm. Prev....	---	---	153	49,496,000	320	101,650,000
Total, Demonstrations...	227	55,419,000	596	155,608,000	783	220,253,000
Training:						
Substance Abuse...........	2	3,754,000	25	21,063,000	25	21,758,000
Medical Education.........	11	1,246,000	34	4,972,000	34	5,136,000
Total, Training.........	13	5,000,000	59	26,035,000	59	26,894,000
Prev. Mgmt. & Support.......	64	9,434,000	102	11,794,000	135	14,745,000
Total, OSAP...............		69,853,000		193,437,000		261,892,000
FTE.....................		64		102		135

OVERVIEW

The Office for Substance Abuse Prevention (OSAP) was created by the Anti-Drug Abuse Act of 1986 to lead the Federal Government's efforts to prevent drug and alcohol abuse. Established as an Office within the Office of the Administrator, OSAP was initially responsible for operating the National Clearinghouse for Alcohol and Drug Information and its related activities, community technical assistance contracts, and a grant program for youth at high risk for substance abuse.

The Anti-Drug Act of 1988 significantly expanded the scope and functions of OSAP, and designated it an institute equivalent within ADAMHA. Three new grant programs were developed and OSAP assumed responsibility for a national training system for prevention and treatment personnel. An expanded focus on community-wide prevention strategies was strengthened by an Administration priority to establish a new Community Prevention program in OSAP during FY 1990.

Numerous public opinion polls identify substance abuse as the number one social and public health concern of Americans. Although recent national surveys have found dramatic reductions in the overall numbers of Americans abusing drugs, these gains are offset by evidence of increasingly pathological, addictive drug use among segments of our society which, for various reasons, are more vulnerable to the addictive process. Trends in cocaine use underscore this shift. Data obtained through the National Institute on Drug Abuse Household Survey show that 50 percent fewer Americans use cocaine today than in 1985; and the number of those who used cocaine in the past year fell from 12 million to 8 million. However, the percentage using it once a week or more has doubled since 1985. The highest rates of cocaine use were among young adults and the unemployed. According to the survey, about 600,000 teenagers had used cocaine in the past year.

There is a close relationship between drug and alcohol use and other problem behaviors among young people, including precocious sexual activity and teen pregnancy, delinquency, truancy, and dropping out of school. Use of the gateway drugs--alcohol, tobacco, and marijuana--can lead to the use of other drugs such as cocaine and PCP. Age of first use also is critical. The earlier a youth begins to experiment with drugs, the greater the likelihood of problems later on. Almost no illicit drug use, except for cocaine and abuse of prescription drugs, begins after age 25.

Minority group members tend to suffer disproportionately from the adverse effects of drugs and alcohol and from other social problems that usually coexist with chemical dependency. Among Native Americans, for example, alcohol and other drug abuse results in large number of preventable deaths, injuries, and illnesses, especially in adolescents and young adults. Most tribes now consider alcohol and other drug use to be their most important health problem. Among Hispanic youth, use of inhalants, alcohol, marijuana, and cocaine is common. Given the tendency of young Hispanic males to drink more heavily than their non-Hispanic counterparts, alcohol is a leading cause of death among these youth.

Drug use by pregnant women--especially cocaine use--is a source of increasing concern. A recent survey, jointly funded by OSAP and the March of Dimes, found that nationally, up to 11 percent of all pregnant women use one or more illicit drugs during pregnancy.

These facts underscore the need for effective prevention and intervention programs that have an impact before or early in the cycle of drug use and abuse. OSAP has structured its prevention and early intervention programs to reach populations at increased risk for substance abuse; to initiate coordinated, community-wide efforts to combat substance abuse in a comprehensive, long-term manner; to train workers in substance abuse prevention strategies; and provide the public with the information it needs to respond effectively to substance abuse problems.

In all of its program efforts, OSAP promotes the concept of no use of any illegal drug and no illegal use of alcohol or other legal drugs. The OSAP bases its prevention work on several premises:

- the earlier prevention is started in a person's life cycle, the more likely its success;
- prevention programs should be research-based;
- prevention programs should be comprehensive--that is, include components of education, health care, social service, religion where culturally appropriate, and law enforcement, as well as family involvement;
- both the process and outcome of prevention programs should be evaluated thoroughly, and clearly effective approaches should be disseminated broadly; and,
- successful programs are most likely to be initiated and conducted by community members.

A. Demonstrations

Authorizing Legislation - Sections 508 and 509G of the Public Health Service Act, and P.L. 100-690, Section 3521.

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$155,608,000	$220,253,000	+$64,645,000

1991 Authorization:
Sections 508 & 509G..................Indefinite
Section 3521.......................$60,000,000

Purpose and Method of Operation

The purpose of this activity is to support demonstration projects which will serve as models effective in preventing alcohol and drug abuse and in treating and rehabilitating persons with substance abuse disorders. The OSAP demonstration programs are grounded in state-of-the-art practices and relevant knowledge and theories in the prevention and treatment fields. These programs seek to advance practice and knowledge by testing innovative prevention/ intervention models in real world settings or adapting known strategies to new populations or in new settings.

Funding levels for the past five fiscal years were as follows:

1986	$3,121,000
1987	$45,896,000
1988	$26,890,000
1989	$55,419,000
1990	$155,608,000

Given the Administration priorities as well as the demands in the field, the OSAP has developed its demonstration programs along three distinct but complementary program lines:

1) a client-oriented approach that emphasizes special populations at risk, particularly youth and pregnant women and their infants;

2) a community systems approach that assists communities develop sound, long-term prevention programs; and

3) a community-at-large approach focused on meeting the demands of the general public for information on substance abuse.

Program aims are pursued through a combination of mechanisms including competitive project grants, block grants to States and territories, and program contracts.

Rationale for the Budget Request

The FY 1991 estimate provides a total increase of $64.6 million or 42 percent, over the FY 1990 level with the major expansion in the following programs: the community prevention program ($52.1 million), the high risk youth program ($5.7 million), pregnant and postpartum women and their infants ($5.2 million), and other demonstrations ($1.6 million). The average cost of a demonstration project increases from $260,000 in FY 1990 to $280,000 in FY 1991 or 7.7 percent. Individual program requests are discussed below.

The FY 1991 request will provide a total of $44.7 million for the high risk youth program. Included in this amount is $40.7 million to support the full continuation cost of ongoing grant and contract efforts. Also included is $4.0 million to support 18 new grants in FY 1991.

The FY 1991 request will provide a total of $37.8 million for the pregnant women and infant program. Included in this amount is $33.8 million to support the full continuation cost of ongoing grant and contract efforts. Also included is $3.9 million to support 15 new grants in FY 1991.

The FY 1991 request for the community prevention program is $101.7 million, an increase of $52.1 million over the FY 1990 level. Included in the total request is $51.7 million to provide continuation support for ongoing grant and contract efforts. Also included is $50.0 million in new funds to provide 167 new grants in FY 1991.

The FY 1991 request will provide $20.7 million for the community youth activity (State prevention) program. This reflects an inflationary increase over the FY 1990 level to maintain the program at essentially the same level of effort as in FY 1990. At this level, each State's block grant allocation is estimated to be approximately $94,365 and most of the territories' allocations are approximately $19,600.

The FY 1991 request will provide $2.1 million for the conference grant program. This reflects a 4.4 percent increase over the FY 1990 level.

The FY 1991 request for the communications program provides a total of $10.8 million for an increase of $.5 million over the FY 1990 level.

1. Client Focus: Special At-Risk Populations

OSAP has two demonstration programs which focus primarily upon prevention and early intervention among populations at risk. These programs are client-oriented in that they target subgroups of the population who are at increased risk for developing alcohol or drug abuse problems and identify individuals within these subgroups who have begun to exhibit symptoms of the problem. These programs also attempt to intervene to prevent the problem behavior from stabilizing into a chronic disorder.

High Risk Youth Program

The high risk youth program was designed in 1987 to develop and/or test innovative strategies to minimize the occurrence of substance abuse problems among high risk youth. A second grant announcement was issued in FY 1989 to expand the program by promoting the development of intervention models that diminish the risk factors for using alcohol and drugs as they impact on individual high risk youth and on the environment in which high risk youth and their families functions.

This demonstration grant program is driven by the realization that a variety of influences prompt young people to experiment with and become dependent upon alcohol and other drugs. In examining four negative outcomes for youth--substance abuse, delinquency, school failure, and early childbearing, researchers have identified at least five common factors that are predictive of poor adolescent outcomes in all four areas:

- Low academic achievement
- Lack of conformity and/or rebelliousness
- Heavy influence by peers.
- Lack of parental support and guidance.
- Early initiation of one behavior associated with other negative behaviors.

Other less well-defined individual and environmental (i.e., physical, social, cultural, economic, etc.) features place a child at risk for using drugs. The likelihood that any particular young person will abuse drugs tends to increase along with the number of risk factors; conversely, the fewer the risk factors, the lower the likelihood that a youth will use or abuse substances.

Not every child with multiple risk factors, however, becomes a substance abuser. Researchers estimate that between 12 and 25 percent of the children of alcoholics develop substance-related problems. Among college-aged sons of alcoholics rates are even lower. Thus, in one of the best understood risk categories, it appears that some 75 percent of the targeted population is resilient to substance abuse. The causes of individual resilience within the high risk categories are not well understood and prevention programs have much to learn from the study of this phenomenon.

Research shows, for example that although resilient children may suffer from constitutional deficits that predispose other children to delinquency and other negative outcomes, resilient children tend to have fewer childhood illnesses and to recuperate more quickly than the vulnerable children. By temperament, the children are outgoing, warm, and autonomous. In school, they show age-appropriate cognitive and social skills. The resilient children have access to natural, caring support systems within their nuclear family or alternatively, when faced with instability within their immediate family, within the extended family, among peers or among trusted community members such as ministers or teachers.

Grantee Evaluations

OSAP strongly encourages grantees to evaluate some components of their projects. Although there is a growing body of information about the characteristics of high-risk youth, families, and communities, much less is known about which preventive interventions are most effective. Given the potential of evaluation studies to help bridge this gap, OSAP provides technical assistance to grantees in selecting evaluation questions, designing evaluation studies, selecting and adapting appropriate instruments, and managing studies. Applicants for the 1989 demonstration grant programs were encouraged to earmark between 15 and 20 percent of the total grant award for evaluation.

Through the work of the OSAP grantees, the prevention field will begin to answer critical questions:

- Are there common characteristics of effective community-based prevention interventions that target high risk youth?
- What common barriers have demonstration programs encountered in implementing their services, and how were they surmounted?
- How have programs targeting high risk ethnic/cultural minority populations adapted their prevention strategies?
- What unique practices have been tested to deal with high risk youths of different ages, developmental stages, or who are subject to specific risk factors such as involvement with the juvenile justice system, having substance abusing parents, or histories of abuse or neglect?
- What linkage strategies have been developed to enhance accessibility to services?
- What programs and practices are most promising for dissemination, multi-site replication, or controlled research trials on the basis of evaluation findings?
- What gaps in prevention practice have been identified by evaluation studies that should be addressed by policy makers?

Several demonstration grant recipients (such as the Boys Clubs of America, SMART MOVES from Penn State, the Student Assistance Services Corporation, and the Girls Clubs of America) had previously developed substance abuse prevention strategies with high risk youth and tested them in single sites. These grantees now are conducting multi-site replication studies, in which their program model is being tested in 5 or more sites. By replicating a program model, these grantees can make use of more sophisticated research and evaluation technologies, including the appropriate use of control groups, comparison groups, random assignment of subjects to conditions, etc. During FY 1991, we anticipate that at least 6 additional programs will have shown sufficient promise to warrant replication studies.

Several demonstration programs already have found striking evidence that their programs are working with very high risk children. An example is the Boys Club of America. The Boys Club program used OSAP funds to open 5 new service sites in public housing projects. An additional 9 sites were opened using funds from the Henry J. Kaiser Family Foundation. The aim of the program is to demonstrate the impact of public housing-based Boys and Girls Clubs that have strong substance abuse prevention programming. Local clubs compete for seed grants from the national association to develop public housing programs, and the OSAP funds became the catalyst for securing substantial local resources. The new Blackhawk Housing Project Unit in Rockford, Illinois, for example, received $17,500 from OSAP, and raised an additional $47,800 from the local United Way, $21,000 from the State youth Service Network, $5,000 from the Rockford park District, and a new $40,000 basketball floor and a bus from the local housing authority.

Evaluation studies have found that, when a Boys and Girls Club is opened in a housing project, living conditions consistently improve. In many cases the community organizing that accompanies the establishment of a Boys and Girls Club has generated increased police presence within the housing project. While the police concentrate on the immediate crises of reducing crime and controlling substance abuse, the Clubs appear to be reaching deeper, addressing the causes of substance abuse.

Cross-site Evaluation

In addition to encouraging individual project evaluations, OSAP has underway a cross-site evaluation of the demonstration grant program. The evaluation identified at least 9 clusters of projects that share similar program features and representative program sites for each of these clusters will be selected for evaluation. About 50 of the original 130 demonstration projects are being intensively studied throughout the three years of this contract. Site visits, pilot evaluation studies, ethnographic observation, and other evaluation techniques are being used.

During FY 1990 and FY 1991, the contractor will work with individual grantees to test previously validated outcome effectiveness measures within their programs. In addition, the contractor will develop several needs assessment approaches to determine the intensity and magnitude of need for substance abuse prevention services in particular communities.

Targets and Beneficiaries of the Demonstration Grant Programs

In a six month sampling period between October 1, 1988 and March 31, 1989, 40,530 youth and 14,708 family members received services through the demonstration grants. Of the high risk youth served, 29 percent were Black, 24 percent were Hispanic, 36 percent were White, 7 percent were Asian, and 3 percent were Native American. Ages of those served range from 5 to 19, with a peak number in early adolescence. In addition to the youth and family members receiving direct services, grantees provided training programs for 26,292 persons, and conducted 1,949 public information events.

What We Have Learned

Through its demonstration grants, OSAP has found that social and emotional support and specific services, such as food, housing, physical safety, and employment, must be provided before an individual, family, or neighborhood hears a prevention or health promotion message. The more effective prevention programs often co-locate or collaborate with agencies meeting these primary needs. Other "keys to success" include:

- Effective programs provide intensive, comprehensive, individualized services with aggressive attention to outreach and to maintaining relationships over time. A program that tries to serve too many sites or reach too many clients is generally ineffective.
- Effective prevention and early intervention programs target factors where they have some leverage.
- Early intervention, e.g., concentrated preschool programs, make a difference in later school adjustment, achievement and behavior. For high risk youth, early efforts should be sustained over several years, and supplemented by "booster" sessions.
- Other adults can act as a child's advocate, mentor, and guide in the increasing situations where they are deprived of parental attention.
- Programs that combine parent training, especially in communications skills and limit setting skills, and skill building programs for youth, are effective in preventing drug use in high risk youth.
- Almost every successful program involves the school system.
- A high level of program structure--i.e., clearly defined instructional objectives tied to overall program goals, meticulous planning of program activities, rigorous training of staff in methods and content of the program, and strong leadership and supervision of staff--has been consistently related to program effectiveness.

Information Dissemination

Information dissemination is a key facet of the high risk grant program. The primary dissemination vehicle is the OSAP Learning Community, a network of applied prevention program staff, grantees, government officials, researchers, and advocates who convene annually to exchange information. The Learning Community facilitates the rapid dissemination of effective prevention strategies, and the sharing of hypotheses as well as practical experiences which may be clinically or programmatically valid, but which do not yet form the basis of a research finding.

Pregnant Women and Their Infants

OSAP initiated a new program in FY 1989 designed to develop innovative, community-based models of education, prevention, and/or treatment, for substance abusing pregnant women and their infants.

While statistics on the number of women who abuse drugs during pregnancy are hard to obtain, a 1988 survey conducted by the National Association for Perinatal Addiction Research and Education (jointly funded by grants from OSAP and the March of Dimes Birth Defects Foundation) found that, of 37 hospitals polled throughout the country and representing approximately 155,000 pregnancies annually, on average, 11 percent of the pregnant women used heroin, methadone, amphetamines, PCP, marijuana, and most commonly, cocaine. These researchers estimate that each year as many as 375,000 infants may be affected by their mother's drug use.

The use of any drug during pregnancy introduces an element of risk for both pregnant mother and the fetus. These substances cross the placental barrier and can cause profound, potentially irreversible damage in the newborn. Retarded fetal growth, premature delivery, low birth weight, Sudden Infant Death Syndrome, and drug-specific neonatal withdrawal syndromes are a few of the pathological conditions associated with maternal drug use. Many drug-exposed infants are difficult to care for during their first months of life.

The increasingly widespread problem of intravenous cocaine use by pregnant women results in serious complications, including premature separation of the placenta from the womb, which causes hemorrhaging that threatens the lives of both mother and fetus. Cocaine-addicted women are twice as likely to suffer premature separation of the placenta as women dependent on other drugs and four times as likely as drug-free women to experience this complication. Though this risk is reduced if the pregnant woman discontinues cocaine use in the first trimester, the child remains at high risk for neurobehavioral impairment.

Most drug-using pregnant women receive neither prenatal care nor drug treatment services. Many women who do seek help during pregnancy have a difficult time finding it because of the insurance, legal and even moral issues involved. In a recent survey of 78 drug treatment programs in New York City, 54 percent refused to treat pregnant women; 67 percent refused to treat pregnant women receiving Medicaid benefits; and 87 percent had no services available to pregnant women on Medicaid who were addicted to crack. Less than half of the programs that did accept pregnant women provided prenatal care and only two made provisions for patients' children.

Demonstration grant programs are designed to promote the coordinated participation of multiple organizations in the delivery of comprehensive services for substance using pregnant and postpartum women and their infants. During FY 1989, OSAP awarded 20 grants under this program.

2. Community Systems Focus

OSAP recognizes that its overall prevention or intervention strategy will be most effective if it assists communities to develop comprehensive, collaborative, and systematic approaches which emphasize local community involvement, systems, and environmental changes reflecting that community's values and institutions.

Through contracts and interagency agreements, OSAP has been able to provide technical assistance to communities and organizations interested in developing and/or enhancing prevention systems. The level and scope of Federal involvement varies, depending upon the nature of the community's alcohol and other drug abuse problems and their efforts to address them. Building on the Federal model, the communities are expected to develop self-sustaining systems.

Given the funding increases and additional programmatic responsibilities mandated under the Anti-Drug Abuse Act of 1988 and P.L. 101-164, OSAP has developed two demonstration programs, described below, which focus on assisting communities in the development of sound, workable long-term, area-wide prevention programs.

Community Prevention (Partnership)

Initiated in FY 1990 with funds provided by P.L. 101-164 and P.L. 101-166, the community prevention (partnership) program is designed to stimulate the formation of local coalitions, consortiums and partnerships for the purpose of developing comprehensive, multi-disciplinary drug abuse prevention systems within local communities. Based on OSAP's collaborative efforts with the Robert Woods Johnson Foundation which has a similar program, OSAP recognizes the need and demand from communities for comprehensive prevention systems. The OSAP program is consistent with the concepts of the Robert Woods Johnson community prevention program but expands the approach by including communities of all sizes.

This program promotes sound, long-term prevention systems by creating a forum through which local interests, including parents, youth, representatives from business and industry, religious institutions, civic groups, health care agencies, local governments, and other organizations can work together to implement community-wide alcohol and other drug abuse prevention and treatment initiatives. Initial studies of the effects of comprehensive community-based prevention programs indicate a promising reduction in the use of gateway drug use among adolescents when planned appropriately. The combination of community organization, parent education, media involvement, peer resistance, and multidimensional school programming constitutes a powerful stimulus for changing community norms regarding the use of drugs, increasing the success of each individual program component.

Community Youth Activity Program

Authorized under the Anti-Drug Abuse Act of 1988, this program was initiated during FY 1989 for the purpose of providing funding to communities and/or National organizations with community-based affiliates to establish and evaluate innovative alcohol and other drug abuse prevention services programs for youth, especially those who are not in school, are at risk of dropping out, or are involved with gangs. The program is comprised of three distinct components, with the funding for each allocated on the basis of a formula provided in the legislation. Program components include the following:

- Projects of National Significance: This program supports projects designed to develop community-based activities for youth; specifically, to stimulate incorporation of drug and alcohol prevention components into existing organizations serving youth. In FY 1989, seven contracts were awarded to organizations or associations with a national base.

- Block grants, which provide funds to States and territories to enable them to provide financial assistance for community services and partnerships designed to develop community activities targeted at the prevention of drug abuse among youth.

- Competitive grants, funded through State agencies, provide new and innovative approaches to developing community services and partnerships targeted to drug abuse prevention through education training, and recreation activities. During FY 1989, 23 competitive grants were awarded to the States.

Evaluation at both the project level and cross-site level are currently underway to assess the implementation experiences and outcomes of all components of this program.

The State table showing the allocations for this activity follows:

State Prevention Block Grant

State/Territory	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Total	$3,629,918	$4,795,996	$5,004,980
Alabama	68,509	90,423	94,365
Alaska	68,509	90,423	94,365
Arizona	68,509	90,423	94,365
Arkansas	68,509	90,423	94,365
California	68,509	90,423	94,365
Colorado	68,509	90,423	94,365
Connecticut	68,509	90,423	94,365
Delaware	68,509	90,423	94,365
District of Columbia	68,509	90,423	94,365
Florida	68,509	90,423	94,365
Georgia	68,509	90,423	94,365
Hawaii	68,509	90,423	94,365
Idaho	68,509	90,423	94,365
Illinois	68,509	90,423	94,365
Indiana	68,509	90,423	94,365
Iowa	68,509	90,423	94,365
Kansas	68,509	90,423	94,365
Kentucky	68,509	90,423	94,365
Louisiana	68,509	90,423	94,365
Maine	68,509	90.423	94,365
Maryland	68,509	90,423	94,365
Massachusetts	68,509	90,423	94,365
Michigan	68,509	90,423	94,365
Minnesota	68,509	90,423	94,365
Mississippi	68,509	90,423	94,365
Missouri	68,509	90.423	94,365
Montana	68,509	90.423	94,365
Nebraska	68,509	90,423	94,365
Nevada	68,509	90,423	94,365
New Hampshire	68,509	90,423	94,365
New Jersey	68,509	90,423	94,365
New Mexico	68,509	90,423	94,365
New York	68,509	90,423	94,365
North Carolina	68,509	90,423	94,365
North Dakota	68,509	90,423	94,365
Ohio	68,509	90,423	94,365
Oklahoma	68,509	90,423	94,365
Oregon	68,509	90,423	94,365
Pennsylvania	68,509	90,423	94,365
Rhode Island	68,509	90,423	94,365
South Carolina	68,509	90,423	94,365
South Dakota	68,509	90,423	94,365
Tennessee	68,509	90,423	94,365
Texas	68,509	90.423	94,365
Utah	68,509	90,423	94,365
Vermont	68,509	90,423	94,365
Virginia	68,509	90,423	94,365
Washington	68,509	90,423	94,365

State/Territory	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Total	$3,629,918	$4,795,996	$5,004,980
West Virginia..............	68,509	90,423	94,365
Wisconsin..................	68,509	90,423	94,365
Wyoming....................	68,509	90,423	94,365
Puerto Rico................	68,509	90,423	94,365
Subtotal, States.........	3,562,468	4,701,996	4,906,980
American Samoa............	14,250	18,800	19,600
Guam.......................	14,250	18,800	19,600
No.Mariana Islands.........	14,250	18,800	19,600
Trust Territories:			
Micronesia................	9,000	11,900	12,400
Marshall Islands..........	---	5,000	5,200
Palau.....................	1,450	1,900	2,000
Virgin Islands.............	14,250	18,800	19,600
Subtotal, Territories.....	67,450	94,000	98,000
Total, State Prevention...	3,629,918	4,795,996	5,004,980

Substance Abuse Prevention Conference Grants

Substance Abuse Prevention Conference grants complement OSAP's comprehensive community prevention efforts by providing a forum for knowledge development and information sharing among service-oriented constituency groups involved in substance abuse prevention. Conferences address information or strategy development needs in such areas as new technologies, problem solving, network building, or public policy deliberations. Priority consideration is given to those which: demonstrate the potential for knowledge dissemination; interface with other health promotion concepts and practices; encourage community coordination and mobilization; and utilize resources effectively.

In FY 1989, the program's first year, OSAP received 166 applications for conference support and funded 23 grants. The grants covered a broad spectrum of issues related to substance abuse: women's chemical dependency, gang violence, adolescent substance abuse, and the development of community coalitions. Several focused on issues specific to particular ethnic/minority groups including Native Americans, Native Alaskans, Asian-Pacific Americans, Blacks, and Hispanics. Summaries of the conferences and their outcomes will be published in OSAP's Prevention Pipeline, a bimonthly publication. During FY 1990, OSAP anticipates funding approximately 45-50 additional conference grants.

3. Community-At-Large focus--Communications Activities

A key role of OSAP is to disseminate the knowledge gained from prevention researchers, OSAP grantees, and other sources to the prevention services field and the general public.

Knowledge Transfer/Outreach Contract Activities

Knowledge transfer is primarily carried out through the National Clearinghouse for Alcohol and Drug Information (NCADI). NCADI's resources include scientific findings, prevention program and product descriptions, publications, posters, kits for parents, teachers, and youth, and information about organizations and groups concerned with alcohol and other drug problems. The NCADI also develops special fact sheets and resource packages that can be adapted for use at the community level by a wide range of gatekeepers who assume a responsibility for local prevention efforts. Each month, the Clearinghouse answers more than 14,000 telephone and mail requests and this number is expected to increase dramatically when OSAP adds an 800 toll-free number in the Spring of 1990.

In order to address hard-to-reach audiences, OSAP has created a Regional Alcohol and Drug Awareness Resource (RADAR) Network, consisting of State and national organizations which are beginning to build "mini-clearinghouses." RADAR Network members not only disseminate materials produced and/or distributed by NCADI, but provide feedback about the nature of the alcohol/drug problems in their areas, the nature of the people most in need of this information, and the messages and materials that are most useful to these audiences. By mid-1989, 110 such clearinghouses had been established, 22 in foreign countries.

The materials development and marketing support initiative responds to the tremendous demand from the parents movement and other grass roots efforts for information. In an attempt to use the media to expand the reach for prevention and intervention messages, OSAP has developed a set of generic materials generally referred to as "The Drug-Free Community Series." A study commissioned by OSAP to identify all existing alcohol/drug materials for high risk youth found many gaps in the literature, and provided direction for future information development efforts. In addition, a sports initiative is being undertaken in cooperation with the Office for Smoking and Health which describes about how smoking, drinking, and other drug-taking can interfere with "The Performing edge"--the title of this effort.

OSAP has played a major role in the development and implementation of major public education campaigns such as the recently released "Be Smart! Don't Start!" program for 8 to 12 year-olds and those who influence their attitudes and behavior; a school outreach program featuring Fat Albert and the Cosby Kids; and a joint effort with the National Crime Prevention Council featuring "McGruff." OSAP currently is developing a media campaign building on the theme: "The pain of one is the pain of all. The pride of one is the pride of all. Stay Smart! Don't Start Drugs!" Its purpose is to reinforce comprehensive, community-wide efforts already being planned or implemented.

This effort is being planned in conjunction with several Federal agencies including the Department of Education.

OSAP also has lead agency responsibility within the Public Health Service for following up recommendations from the Surgeon General's Workshop on Drunk Driving held in December, 1988. Drugs other than alcohol also will be addressed and special emphasis will be placed on reaching minority audiences.

Communications Program Grants

To enhance its ongoing communications/knowledge transfer efforts, OSAP began the communications program grants in FY 1990. These grants are intended to fund projects that propose innovative communications programs designed to reach hard-to-find and/or high-risk audiences in specific populations through mass communication. Emphasis is placed on collaborative efforts that link various organizations working with the targeted populations, that increase credibility and utility of messages by linking them with community organizations, and resources that involve the particular target audiences in the development and testing of messages and materials. Recent research has suggested that mass communication efforts can be highly effective, especially when linked with local organizations and resources in a coordinated program.

During FY 1990, we anticipate that at least 24 new grants and 5 new contracts will be made under this program to universities, colleges, hospitals, community-based organizations, units of State and local governments, as well as private organizations.

B. Training

Authorizing Legislation - Section 508 of the Public Health Service Act.

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$26,035,000	$26,894,000	+$859,000

1991 Authorization.................... Indefinite

Purpose and Method of Operation

The training initiatives of OSAP are designed to meet the training needs of health professionals, allied health care professionals, substance abuse counselors, and community leaders who are involved in providing substance abuse prevention and treatment services. This activity supports two specific training efforts: Substance Abuse Training mandated under the Anti-Drug Abuse Act of 1988 and the ongoing Alcohol/Drug Health Professional Education program.

Funding levels for the past five fiscal years were as follows:

1986................................	$0
1987................................	$0
1988................................	$0
1989................................	$5,000,000
1990................................	$26,035,000

Substance Abuse Training

The OSAP National Training System (NTS) was initiated in September 1989 with the award of two contracts--one involving resource identification and one forming the core of a National Training System.

This NTS contract is designed as a foundation for building a comprehensive training capability which, over time, will include new efforts as well as complement many other training and technical assistance resources now available. The NTS has been structured to provide training programs for all elements of the system, from the preservice training of primary and allied health care personnel, to continuing education of professionals in the field and community leaders. Features of the system include:

- Training for substance abuse counselors and other health professionals, and for staff, volunteers and boards of community organizations.
- Training courses across the full continuum of care--from prevention through treatment.
- Teacher training courses and provision of curricula to State agencies.
- Follow up technical assistance to those receiving training

- Consultation with NIAAA and NIDA, and coordination with the ADAMHA Office for Treatment Improvement (OTI), to ensure that institutional and continuing education training programs are complementary.

The resource identification contract will inventory educational materials provided by both public and private agencies in order to assist the National Training System in developing curricula and avoiding duplication of existing training resources. Through this contract OSAP will have an automated data system on training programs which will be maintained by the NTS.

Health Professions Education

Graduate training programs for health professionals involved in alcohol or other drug abuse treatment will be continued in FY 1991. This program is a combined effort involving OSAP, the National Institute on Drug Abuse (NIDA), and the National Institute on Alcohol Abuse and Alcoholism (NIAAA).

Over the past several years, the two institutes have awarded contracts and grants to develop and demonstrate effective models of integrating alcohol and drug abuse teaching into medical and nurse education curricula. A faculty development grant program was initiated in FY 1989. Under this program, grants are awarded to medical and nursing schools to conduct three year faculty training programs for targeted faculty fellows in their institutions. Within each school, three to five faculty, each representing a different clinical department, have dedicated up to 15 percent of their time to this professional development program. During FY 1990, the faculty development program is being significantly enhanced, permitting about 25 additional schools to develop programs.

Rationale for Budget Request

The FY 1991 request provides a total of $26.9 million, an increase of $.9 million or 3.3 percent over the FY 1990 level. This level provides full funding for the continuation of both program efforts in FY 1991.

Funds provided in FY 1990 will allow OSAP to have a significant impact on the quantity and quality of trained personnel available for new and continuing drug abuse prevention and treatment programs. The $21.0 million increase provided by Congress in FY 1990 for these programs resulted in a $26.0 million budget in the following areas:

- $7.5 million to expand the basic NTS to increase training for health professionals, community organizations, and trainers.
- $1.5 million for training related to pregnant women and their infants.
- $10.0 million to increase the pool of substance abuse counselors; about 20 competitive contracts will be awarded to accredited organizations on a balanced programmatic as well as geographic basis.

- $1.0 million for materials dissemination, to be accomplished through a separate contract with NCADI and through OSAP's and OTI's technical assistance activities.
- $.5 million to develop nationally agreed upon minimum competencies for substance abuse counselors.
- $.5 million for Phase I Evaluation of NTS.
- $5.0 million for expanded health professions education program.

C. Prevention Management and Support

Authorizing Legislation - Section 508 of the Public Health Service Act.

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$11,794,000	$14,745,000	+$2,951,000

1991 Authorization..................... Indefinite

Purpose and Method of Operation

This activity provides for management of OSAP's programs. Included are the salaries and support costs for the staff who provide program monitoring as well as the technical, managerial, and administrative support in the development and implementation of OSAP's programs; as well as for the staff who manage the grant review and award process. OSAP will continue to augment its staff expertise with that of outside experts who assist in assessing the state of knowledge in the prevention area. An OSAP Advisory Board, responsible for examining ongoing OSAP programs and identifying needs for future demonstration program directions, will soon be convened.

Funding levels for the past five fiscal years are as follows:

1986	$1,364,000
1987	$6,628,000
1988	$7,308,000
1989	$9,434,000
1990	$11,794,000

Rationale for Budget Request

The FY 1991 request reflects a net increase of $3.0 million over the FY 1990 level. This level provides $2.4 million for built-in increases, including the annualization of 23 FTEs, and $.6 million for 10 new FTEs.

Summary of Changes

The FY 1991 request of $14,745,000 reflects an increase of $2,951,000 over the comparable FY 1990 level. The increases are identified as follows:

Built-in Increases	
Jan. 1990 pay annualization	+$43,000
Jan. 1991 pay increase	+193,000
Within grade increases	+54,000
Increased PHS Service & Supply Fund	+12,000
Increased FTS costs	+2,000
Increased FERS costs	+12,000
Increased Rental Payments to GSA	+14,000
Increased Social Security (FICA)	+10,000
Increased cost of non-pay items including laboratory materials and other supplies	+4,000
Annualization of 50 new positions in 1990	+1,862,000
Restoration of program cuts used to absorb Jan. 1990 pay raise	+130,000
One extra day of pay	+15,000
Subtotal, Built-in Increases	+2,351,000
Program Increases	
Salaries & Program Support for 10 additional FTEs	+600,000
Subtotal, Program Increases	+600,000
Total, Increases	+2,951,000

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VI. Treatment

Budget Authority by Mechanism

	1989 Actual		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount
Treatment Programs:						
Waiting List Grants:						
Continuations............	---	---	---	---	---	---
New & Competing..........	29	$75,000,000	24	$64,345,000	---	---
Subtotal, Waiting List..	29	75,000,000	24	64,345,000	---	---
Treatment Improvement Grants:						
Continuations............	---	---	---	---	350	$45,569,000
New & Competing..........	---	---	350	39,597,000	3	40,000,000
Subtotal, Trmt Grants...	---	---	350	39,597,000	353	85,569,000
Treatment Grants to Crisis Areas:						
Continuations............	---	---	---	---	6	29,698,000
New & Competing..........	---	---	6	29,698,000	2	2,387,000
Subtotal, Crisis Grants.	---	---	6	29,698,000	8	32,085,000
Subtotal, Trmt Prgms.	29	75,000,000	380	133,640,000	361	117,654,000
	FTE		FTE		FTE	
Trmt. Management & Support..	---	---	27	2,138,000	50	4,055,000
Grants to States:	No.		No.		No.	
ADMS Block Grant..........	61	805,594,000	60	1,192,851,000	60	1,292,775,000
Homeless Grants...........	56	14,128,000	56	27,813,000	56	33,703,000
State Planning............	57	4,730,000	---	---	---	---
Subt., Grants to States.	174	824,452,000	116	1,220,664,000	116	1,326,478,000
Total, OTI..........	203	899,452,000	278	1,356,442,000	346	1,448,187,000

OVERVIEW

The Office for Treatment Improvement (OTI) was created in FY 1990 to provide a focus within ADAMHA to meet the growing Federal effort to promote and enhance programs and new approaches in the treatment of drug abuse and the associated problems of alcoholism and mental illness. OTI is also expanding treatment capacity through its management of an enlarged ADMS Block Grant and provision of financial assistance for 1) targeted expansion in high intensity areas of drug abuse and 2) specialized treatment programs for substance abusing women of child bearing age and their children; adolescents; minorities; residents of public housing; and individuals with multiple drug, alcohol and mental problems. Finally, OTI collaborates with States, local communities and health care providers as well as national organizations to upgrade the quality of treatment and improve the effectiveness of specific treatment programs.

A. Treatment Improvement

Authorizing Legislation - Section 301, 311, 509G, 516 and 509E of the Public Health Service Act

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$133,640,000	$117,654,000	-$15,986,000

1991 Authorization Sections 301, 311,
509G, & 516 .... Indefinite
1991 Authorization Section 509E [a].... $0

[a] Waiting List Grants (Section 509E) received authorization in the amount of $100,000,000 until expended. All authorized funds were expended in FY 1989 and FY 1990. No additional funds are requested for FY 1991.

Purpose and Method of Operation

These programs provide financial and technical assistance to improve access to, and the quality of, drug abuse treatment programs. OTI supports comprehensive needs assessments in selected areas and works with the appropriate State and local treatment administrators to address improvement needs.

Funding levels for the past five fiscal years were as follows:

1986	$0
1987	$0
1988	$0
1989	$75,000,000
1990	$133,640,000

During FY 1990 OTI will establish programs to improve treatment opportunities and outcomes for high risk populations, including substance abusing women of child bearing age and their children, the homeless, ethnic and racial minorities, and adolescents. Assistance and support is provided through grants, cooperative agreements and contracts.

Rationale for the Budget Request

The FY 1991 request for $117.7 million is a decrease of $16.0 million from the FY 1990 level. This occurs because the waiting list reduction grants, funded at a post-sequestration level of $64.3 million in FY 1990, are not continued in FY 1991. This decrease is partially offset by the increase of other programs including expansion of drug treatment and improvement of treatment effectiveness for $48.4 million in FY 1991.

Specific information concerning the FY 1991 request for each program follows:

- **Waiting List Reduction Grants - FY 1991: $0**

Waiting List Reduction Grants were created in FY 1989 to help alleviate the national shortage of drug treatment slots and services. Funds of $100.0 million were authorized to be available until expended. ADAMHA received grant applications totalling about $117.0 million, of which amount, about $100.0 million was funded in FY 1989 and FY 1990. This provided approximately 20,000 new treatment slots at an average cost of $5,400 each. The balance of the FY 1990 funds appropriated, $39.3 million, requires new authorization in order for ADAMHA to obligate these funds. The program is also not authorized in FY 1991. In addition, the Administration prefers to expand treatment capacity using the block grant mechanism and estimates that 11,000 new drug treatment slots will be made available through the block grant in FY 1991.

- **Treatment Grants to Crisis Areas - FY 1991: $32,085,000**

This effort, begun in FY 1990 will increase by 8 percent in FY 1991. It provides financial and technical assistance to selected urban areas that have been identified as having a high prevalence of drug abuse. The purpose of targeted assistance to these cities is to improve the quality and effectiveness of drug treatment services and promote necessary coordination among various public and private service agencies to assure better attention to the rehabilitation and recovery needs of clients.

- **Treatment Improvement - FY 1991: $85,569,000**

In FY 1990, $39.6 million was appropriated for this program which will assist providers in improvement of treatment opportunities and outcomes. These efforts, which will continue at the requested funding level of $45.6 million in FY 1991, will be especially focused on high risk populations, including substance abusing women of child bearing age, adolescents, rural populations, and members of minority groups. This budget requests $40.0 million for expanding these programs in FY 1991. Another concept being explored is treatment in "campus" settings which would be jointly funded with States.

B. Treatment Management and Support

Authorizing Legislation - Section 301 of the Public Health Service Act

FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
$2,138,000	$4,055,000	+$1,917,000

1991 Authorization.................. Indefinite

Purpose and Method of Operation

The funds allocated to the management, planning, policy development and coordination of the programmatic and administrative functions of the OTI appear in this area. Staff provide direction, monitor projects and grants, manage the review and award of proposals, organize conferences and related activities to promote new initiatives, develop treatment improvement-related policy and disseminate results of program efforts. Additional travel and consultation will be required in this new and evolving area for ADAMHA.

Funding levels for the past five fiscal years were as follows:

1986	$0
1987	$0
1988	$0
1989	$0
1990	$2,138,000

Rationale for the Budget Request

In FY 1991, most of $1.9 million increase is needed to annualize the cost of the FTEs provided in the FY 1989 DOT Appropriation for Drug Abuse Programs. Fifty of the 162 FTEs given to ADAMHA in FY 1990 were allocated to OTI. However, operating costs for this staff were made available for only part of the year since all 50 FTEs were not filled at the beginning of the fiscal year.

Summary of Changes:

The FY 1991 request of $4,055,000 reflects an increase of $1,917,000 over the comparable FY 1990 level. The increases are identified as follows:

Built-in Increases:

Jan. 1991 pay increase	+$55,000
Annualization of 50 new positions in 1990	+1,862,000
Total, Increases	+1,917,000

C. Grants to States

Authorizing Legislation - Title XIX, Part B, of the Public Health Service Act, as amended by Title II of the Anti-Drug Abuse Act of 1988, P.L. 100-690, and Section 535 of the Public Health Service Act.

	FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
ADMS.......	$1,192,851,000	$1,292,775,000	+$99,924,000
MHSH.......	27,813,000	33,703,000	+5,890,000

1991 Authorization......................Indefinite

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1. Alcohol, Drug Abuse, and Mental Health Services Block Grant

Purpose and Method of Operation

P.L. 100-690, the Anti-Drug Abuse Act of 1988, revised and extended the existing Alcohol, Drug Abuse, and Mental Health Service Block Grant (ADMS) and incorporated the Alcohol and Drug Treatment and Rehabilitation (ADTR) block grant program in FY 1989. The ADMS block grant provides funds to States to support alcohol, drug abuse and mental health prevention, treatment, and rehabilitation services.

Funding levels for the past five fiscal years were as follows:

1986....................................	$468,930,000
1987....................................	$671,715,000
1988....................................	$643,234,000
1989....................................	$805,594,000
1990....................................	$1,192,851,000

The formula for distributing the appropriation to the States was changed by P.L. 100-690, phasing in a new allocation over a four year period beginning in FY 1989. States with young, urban populations were to receive a greater proportion of the available funds in order to direct more money to areas of the country where substance abuse problems are most severe. P.L. 101-93, the Anti-Drug Abuse Technical Corrections Act of 1989 made changes to the inter- and intra-State distribution of the ADMS Block Grant to conform to the method of distribution employed and assure that Congressional intent was reflected in law.

The FY 1990 estimate includes an additional $415.0 million added to the original appropriation of $790.0 million to implement the President's War on Drugs. This increased level of funding was earmarked specifically for substance abuse initiatives and had the effect of increasing the amount of money dedicated to substance abuse in the States by 72 percent over FY 1989.

Significant provisions of the ADMS block grant program in FY 1990 are:

- Of the $1,192.9 million appropriated, $895.6 million, or 79 percent of the total, will be dedicated to substance abuse initiatives by the States. Twenty-one percent of the block, or $237.6 million, will be used in the States for mental health services.

- States must use 17.5 percent, or $156.7 million, of their substance abuse funding on IV drug abuse prevention and treatment services in FY 1990. Under certain circumstances, waivers to this provision can be obtained. In FY 1989, 7 States have requested and 6 States have received such waivers.

- Within each State's allocation, 10 percent must be used for programs serving seriously disturbed children and adolescents. The States must also dedicate 10 percent of their allocation to programs affecting women.

- States are allowed to request a waiver to use substance abuse portions of block grant funds for the construction of a new facility or rehabilitation of existing facilities if they show existing treatment facilities are inadequate and that alternative facilities are not available. States must agree to match such costs on a dollar-for-dollar cash basis. The money may not be used for land acquisition.

- ADAMHA will use 5.7 percent of the funds appropriated for the block grant to continue efforts begun in FY 1989 and initiate new programs to gather data, conduct services research on community-based ADM treatment programs, and render technical assistance to the States.

- Pursuant to authorizing legislation, States must obligate the money they receive under this grant within the same fiscal year that it is appropriated by Congress. They have one additional year to expend the obligated money. In the case of the substance abuse increase in FY 1990, appropriation language specifically provided that States have 18 months (until March 1991) to obligate these funds, with an additional twelve months to expend them. To encourage States to improve their rate of drawdown, ADAMHA contracted with the National Association of State Alcohol and Drug Abuse Directors (NASADAD) in FY 1989, to hold three regional conferences in the District of Columbia, Phoenix and St. Louis during October and November. Over 100 State alcohol and drug staff participated in the three conferences. State substance abuse staff not only were made aware of Congressional interest in timely execution of their programs, but also asked to begin immediate action to increase their drawdown rates. By December 31, 1989, the outlays for the FY 1989 ADMS allocation had reached 75.5 percent of the total awarded to the States.

- Legislation requiring the submission of State plans to continue eligibility for receipt of ADMS Block Grant funding was proposed, but not enacted by the end of the first session of the 101st Congress. However, ADAMHA will continue exploring options available internally to encourage the submission of such planning documents to assure that funding is used responsibly and in a timely manner by the States in their efforts to combat substance abuse and mental health problems.

Rationale for the Budget Request

The request for FY 1991 is $1,292,775,000. In order to assure that Congressional and Presidential intent to make additional funding available specifically for Substance Abuse in FY 1990 is continued into FY 1991, a change to appropriation language is being proposed. Without this change in FY 1991, all funding is subject to the current formula for distribution requiring more of each State's allowance to be diverted from substance abuse toward mental health and alcohol, compared to FY 1990.

The 1991 President's Budget proposes to distribute $1,192,851,000 of the FY 1991 request of $1,292,775,000 to each State in the identical amount as their FY 1990 allotments. This portion of their total allotment would be subject to the same constraints as in FY 1990. For instance, the amount the States would be required to spend on mental health and alcohol would remain identical to what they spent in FY 1990. The amount required for IV drug set-aside would remain at the FY 1990 level.

An additional $89,924,000 would be distributed on a proportional basis and would be earmarked for drug abuse initiatives only. Finally, the President has requested an increase of $10,000,000 to be used by ADAMHA specifically for drug abuse Data Collection and Evaluation efforts. This amount would be added to the $64,138,750 ADAMHA will spend as part of the set-aside obtained by tapping 5 percent of the $1,282,775,000 allocated to the States. A State-by-State distribution of the ADMS Block Grant follows:

ADMS Block Grants

State/Territory	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate	
			President's Budget	Current Legislation
Total............	$805,594,000	$1,192,851,000	$1,292,775,000	$1,292,775,000
Alabama...........	12,953,000	18,006,000	19,363,000	18,971,000
Alaska............	2,734,000	2,734,000	2,940,000	2,734,000
Arizona...........	12,497,000	17,519,000	18,840,000	18,472,000
Arkansas..........	7,000,000	8,380,000	9,012,000	8,431,000
California........	87,351,000	140,169,000	150,736,000	153,299,000
Colorado..........	11,165,000	16,414,000	17,651,000	17,586,000
Connecticut.......	10,941,000	16,027,000	17,235,000	17,143,000
Delaware..........	2,125,000	3,073,000	3,305,000	3,270,000
Dist. of Columbia.	3,444,000	4,770,000	5,130,000	5,026,000
Florida...........	39,620,000	59,657,000	64,154,000	64,194,000
Georgia...........	15,837,000	23,701,000	25,488,000	25,463,000
Hawaii............	4,095,000	5,827,000	6,266,000	6,177,000
Idaho.............	2,383,000	2,600,000	2,796,000	2,725,000
Illinois..........	35,699,000	57,509,000	61,844,000	63,051,000
Indiana...........	22,522,000	28,240,000	30,369,000	28,798,000
Iowa..............	4,809,000	7,804,000	8,392,000	8,564,000
Kansas............	5,543,000	7,573,000	8,144,000	8,071,000
Kentucky..........	7,296,000	11,624,000	12,500,000	12,709,000
Louisiana.........	10,191,000	16,486,000	17,729,000	18,128,000
Maine.............	4,654,000	4,654,000	5,005,000	4,654,000
Maryland..........	12,085,000	21,314,000	22,921,000	23,833,000
Massachusetts.....	25,271,000	35,091,000	37,736,000	36,960,000
Michigan..........	27,271,000	43,130,000	46,381,000	47,075,000
Minnesota.........	9,134,000	15,173,000	16,317,000	16,731,000
Mississippi.......	6,853,000	7,972,000	8,573,000	8,331,000
Missouri..........	14,318,000	21,448,000	23,065,000	23,070,000
Montana...........	2,964,000	2,964,000	3,187,000	2,964,000
Nebraska..........	3,949,000	5,431,000	5,840,000	5,816,000
Nevada............	3,890,000	5,404,000	5,811,000	5,674,000
New Hampshire.....	4,627,000	4,627,000	4,976,000	4,627,000
New Jersey........	31,449,000	45,540,000	48,973,000	48,555,000
New Mexico........	6,435,000	6,551,000	7,045,000	6,602,000
New York..........	65,794,000	98,111,000	105,507,000	105,461,000
North Carolina....	14,476,000	21,069,000	22,657,000	22,472,000
North Dakota......	1,630,000	1,855,000	1,995,000	1,944,000
Ohio..............	36,561,000	53,413,000	57,440,000	57,072,000
Oklahoma..........	9,808,000	12,843,000	13,811,000	13,312,000
Oregon............	8,111,000	11,818,000	12,709,000	12,600,000
Pennsylvania......	39,746,000	58,481,000	62,890,000	62,625,000
Rhode Island......	5,503,000	7,222,000	7,766,000	7,477,000
S. Carolina.......	8,909,000	12,949,000	13,925,000	13,805,000
S. Dakota.........	3,759,000	3,759,000	4,042,000	3,759,000
Tennessee.........	12,098,000	18,754,000	20,168,000	20,354,000
Texas.............	40,166,000	65,697,000	70,650,000	72,332,000

ADMS Block Grants-continued

State/Territory	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate President's Budget	FY 1991 Estimate Current Legislation
Total............	$805,594,000	$1,192,851,000	$1,292,775,000	$1,292,775,000
Utah..............	5,686,000	8,502,000	9,143,000	9,148,000
Vermont...........	3,918,000	3,918,000	4,213,000	3,918,000
Virginia..........	14,757,000	23,935,000	25,739,000	26,233,000
Washington........	14,549,000	21,835,000	23,481,000	23,460,000
W. Virginia.......	5,635,000	5,900,000	6,345,000	6,069,000
Wisconsin.........	10,338,000	17,451,000	18,767,000	19,326,000
Wyoming...........	1,285,000	1,285,000	1,382,000	1,285,000
American Samoa....	100,000	167,000	180,000	181,000
Guam..............	630,000	647,000	696,000	647,000
No. Mariana Isl...	100,000	100,000	108,000	100,000
Puerto Rico.......	9,299,000	14,298,000	15,376,000	15,519,000
Trust Territories.	136,000	539,000	580,000	585,000
Virgin Islands....	1,215,000	1,248,000	1,342,000	1,248,000
Subtotal.....	765,314,000	1,133,208,000	1,218,636,000	1,218,636,000
Set-aside.........	40,280,000	59,643,000	74,139,000	74,139,000
TOTAL.......	$805,594,000	$1,192,851,000	$1,292,775,000	$1,292,775,000

Block Grant Set-aside

With the increase of $10.0 million, ADAMHA will spend $74.1 million for data collection, services research and technical assistance programs. That amount is actually 5.7 percent of the total funds requested in FY 1991. The display appearing below shows, by category, how the funds were used in FY 1989, and how they are anticipated to be used in FY 1990 and FY 1991.

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Data Collection.........	$28,821,200	$41,711,067	$55,441,250
(Co-morbidity: Epidemiology)(non-add)	(2,500,000)	(4,688,977)	(4,718,953)
Services Research.......	9,958,800	16,431,933	17,197,500
(Co-morbidity: Services)(non-add)....	(1,885,368)	(3,159,565)	(3,460,787)
Technical Assistance....	1,500,000	1,500,000	1,500,000
Total...............	$40,280,000	$59,643,000	$74,138,750

In FY 1990 $41.6 million of the total set-aside of $59.6 million will be used to continue projects initiated in FY 1989. Projects initiated in FY 1989 or FY 1990 will continue into FY 1991. In FY 1991, $10.0 million of the $14.5 million increase will be used exclusively for data collection in the drug abuse area.

Data Collection Activities

- o **Metropolitan Area Survey (Washington, D.C.): $8,601,846**

  This is a large, 3-year study of the prevalence, incidence, and health consequences associated with drug abuse in the Washington, D.C. metropolitan area. Drug abuse data will be gathered from households, elementary and high schools, and hidden populations, including persons who are homeless, transient, mentally ill, and institutionalized, and from medical and law enforcement agencies. Existing drug abuse survey instruments will be examined and modified as appropriate; otherwise, new data collection methods will be developed. The study will demonstrate that a comprehensive data collection system can be developed for estimating the prevalence, incidence, and consequences of drug abuse in a metropolitan area, and can then be used for public health monitoring and resource management by community, State, and Federal health care providers and policy decision makers. A key product of the project is expected to be the development of portable methodologies for estimating hard-to-enumerate populations in specific geographical areas. As these methods become refined, they will be applied to additional metropolitan areas in future studies. In FY 1991 this study will be expanded to cover six cities.

- o **National Health Interview Survey: $750,000**

  Included in a drug abuse supplement to the NHIS will be questions on patterns and consequences of marijuana and cocaine use. The NHIS collects data from approximately 50,000 households including about 135,000 persons each year. Data from the drug abuse supplement will be correlated with the core NHIS data on the incidence of acute illness and injuries, the prevalence of chronic conditions, the extent of disability, and the utilization of health services.

- o **_In Utero_ Drug Exposure Survey: $1,856,008**

  Drug use during pregnancy has been associated with adverse effects on the fetus and the newborn. This study is a survey of a nationally representative sample of mothers who have delivered infants in hospitals. They will be interviewed about their drug use previous to and during pregnancy. Questions will include the type of drug(s) used, timing, duration, frequency, route of administration, and dose consumed. This survey will provide, by 1991, national reliable and comprehensive data on _in utero_ drug exposure, including prevalence of drug use during pregnancy, estimates of the number of newborns in the United States who are exposed to drugs during pregnancy, and characterization of exposed infants and their mothers.

- **1991 National Household Survey on Drug Abuse:** $5,500,000

  In 1991, the Household Survey will include the basic survey, an oversample in six metropolitan areas, and an oversampling of Blacks, Hispanics, and young people.

- **State Alcohol and Drug Abuse Profile (SADAP):** $120,000

  This annual survey of State alcohol and drug abuse agencies is conducted by the National Association of State Alcohol and Drug Abuse Directors, with contract support from NIAAA and NIDA. From existing data systems and records, the State agencies provide summary, State-level data on amounts and sources of funding for State-funded programs and numbers and characteristics of clients admitted to treatment. Narrative descriptions of major policy issues, unmet needs, and recent changes in State services are also provided.

- **U.S. Mexican Border Study:** $750,000

  This epidemiologic study will describe the nature and extent of drug abuse along the United States-Mexico border. Included will be information on the difference in drug abuse patterns between sister cities along the border and differences in drug abuse patterns between cities along the border with other cities in the same State.

- **The Descriptive Survey of Alcohol and Drug Treatment Units and Clients** $1,400,000

  This survey is a two-tier study to furnish data that is not available from existing sources. From the survey data, scientists will be able to calculate the percentage of individuals completing treatment, the length of time between requesting and receiving treatment, the methods of treatment used, the number who return for treatment, and the number receiving public assistance versus private insurance coverage for treatment costs. The range and content of treatment services, settings and staff resources will also be appraised. The survey will ascertain the extent of impairment, demographic characteristics, treatment histories, sources of payment, services received, and referral patterns. This data is also requested in the Anti-Drug Abuse Act of 1988.

Services Research Activities

- **Substance Abuse Coverage Study:** $124,200

  NIDA is managing a Congressionally mandated Institute of Medicine study of the extent and adequacy of coverage for substance abuse services. The study will include a limited look at the quality, cost, and effectiveness of treatment. The study addresses such issues as mandated or expanded drug abuse coverage in both the public and private sectors. Private insurance coverage is being examined to determine whether adjustments are needed to better reflect actual costs and promote access to appropriate treatments. The study also considers whether mechanisms such as block grants offer appropriate coverage for drug abuse services. This is an extension of an existing contract for the Congressionally mandated IOM study.

- **Analysis of Trends in the Cost, Utilization, and Coverage of Drug Abuse Services in the Department of Defense (DOD) and in the Veterans Administration (VA):** **$517,500**

  This study of drug treatment options and costs in the DOD and in the VA will focus on utilization rates and treatment options. As the treatment is generally free, costs will be imputed and the study will have a longitudinal focus.

- **Study and Analysis of Quality and Outcome Measurement Instruments in the Field of Drug Abuse Services:** **$414,000**

  This project will focus on identifying, analyzing, and evaluating structural, process, and outcome factors that contribute to the quality and successful outcome of drug abuse services. This will include a review of the literature and development of an annotated bibliography on quality of drug abuse treatment, as well as identification of major problems in the assessment of cost benefit and cost effectiveness. Critical review and analysis of the methodological approaches to the assessment of the necessity, appropriateness, and effectiveness of drug abuse treatment will be formulated. Recommendations regarding the adoption of common approaches to the assessment of the quality and cost of drug abuse care will result from this study.

Technical Assistance

In FY 1991, $1,500,000 is being requested to provide technical assistance in response to specific State requests. The Office for Treatment Improvement is exploring contractual relationships with a variety of organizations including NASADAD, NASHMHPD, National Conference of State Legislatures, National Governors Association, etc. to provide direct technical assistance to States. All of the technical assistance provided will be directed at ensuring that block grant funds will be used to gain maximum advances in the "War on Drugs", as well as research, treatment and prevention of alcoholism, and mental health disorders.

2. Mental Health Services Block Grant for the Homeless

Purpose and Method of Operation

Funds are provided through block grants which enable States or Territories, which are closer to the problems, to determine the needs of their communities and determine the best ways to use this funding to meet those needs. This block grant supports programs such as outreach to the chronically mentally ill, outpatient community mental health services, diagnostic, crisis intervention, habilitation and rehabilitation services, referral to primary health and substance abuse services, training for workers in shelters, clinics and other sites, and case management services for the individuals who are homeless or who are subject to a significant probability of becoming homeless.

Funding levels for the past five fiscal years were as follows:

1986	$0
1987	$32,200,000
1988	$11,489,000
1989	$14,128,000
1990	$27,813,000

Rationale for the Budget Request

The FY 1991 request provides a total of $33,703,000 for continuation of programs enhanced in FY 1990. This figure also includes $6,904,000 in advance funding Congress appropriated specifically for obligation in FY 1991. The State-by-State distribution of these funds follows:

Mental Health Services to the Homeless Block Grant

State/Territory	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Total....................	$14,127,960	$27,813,000	$33,703,000
Alabama....................	267,944	287,000	357,000
Alaska....................	267,944	275,000	275,000
Arizona....................	267,944	312,000	471,000
Arkansas....................	267,944	275,000	275,000
California..................	267,944	3,219,000	4,538,000
Colorado....................	267,944	328,000	442,000
Connecticut................	267,944	377,000	462,000
Delaware....................	267,944	275,000	275,000
District of Columbia.......	267,944	275,000	275,000
Florida....................	267,944	1,210,000	1,786,000
Georgia....................	267,944	424,000	580,000
Hawaii....................	267,944	275,000	275,000
Idaho....................	267,944	275,000	275,000
Illinois....................	267,944	1,350,000	1,617,000
Indiana....................	267,944	424,000	505,000
Iowa....................	267,944	275,000	275,000
Kansas....................	267,944	275,000	275,000
Kentucky....................	267,944	275,000	275,000
Louisiana..................	267,944	358,000	443,000
Maine....................	267,944	275,000	275,000
Maryland....................	267,944	511,000	661,000
Massachusetts..............	267,944	724,000	876,000
Michigan....................	267,944	941,000	1,107,000
Minnesota..................	267,944	334,000	417,000
Mississippi................	267,944	275,000	275,000
Missouri....................	267,944	427,000	526,000
Montana....................	267,944	275,000	275,000
Nebraska....................	267,944	275,000	275,000
Nevada....................	267,944	275,000	275,000
New Hampshire..............	267,944	275,000	275,000
New Jersey..................	267,944	1,024,000	1,264,000
New Mexico..................	267,944	275,000	275,000
New York....................	267,944	2,246,000	2,699,000
North Carolina.............	267,944	326,000	424,000
North Dakota...............	267,944	275,000	275,000
Ohio....................	267,944	1,065,000	1,261,000
Oklahoma....................	267,944	275,000	275,000
Oregon....................	267,944	275,000	275,000
Pennsylvania...............	267,944	1,167,000	1,391,000
Rhode Island...............	267,944	275,000	275,000
South Carolina.............	267,944	275,000	275,000
South Dakota...............	267,944	275,000	275,000
Tennessee..................	267,944	340,000	427,000
Texas....................	267,944	1,486,000	2,073,000

Mental Health Services to the Homeless Block Grant-continued

State/Territory	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Total....................	$14,127,960	$27,813,000	$33,703,000
Utah......................	267,944	275,000	275,000
Vermont...................	267,944	275,000	275,000
Virginia..................	267,944	496,000	657,000
Washington................	267,944	427,000	566,000
West Virginia.............	267,944	275,000	275,000
Wisconsin.................	267,944	380,000	463,000
Wyoming...................	267,944	275,000	275,000
American Samoa............	48,718	50,000	50,000
Guam......................	48,718	50,000	50,000
No. Mariana Islands........	48,718	50,000	50,000
Puerto Rico...............	267,944	280,000	340,000
Virgin Islands............	48,718	50,000	50,000
TOTAL............	14,127,960	27,813,000	33,703,000

VII. Buildings and Facilities

Authorizing Legislation - Section 301 of the Public Health Service Act.

	FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
	$196,000	$3,126,000	+$2,930,000
HIV/AIDS	(---)	(1,600,000)	(1,600,000)

1991 Authorization.................... Indefinite

Purpose and Method of Operations

This account includes funds that are available until expended for construction, repair, and improvement of ADAMHA intramural research facilities. These facilities are located in five places: the National Institutes of Health Campus (NIMH and NIAAA); St. Elizabeths Hospital (NIMH); the Flow Laboratory Building (NIAAA); the Poolesville Animal Facility; and the Addiction Research Facility (ARC) at the Francis S. Key Hospital, in Baltimore, MD (NIDA).

Funding levels for the past five fiscal years were as follows:

1986	$96,000
1987	$600,000
1988	$191,000
1989	$198,000
1990	$196,000

Ground has been broken for Building 49 and NIH has included $40.0 million in their FY 1991 budget and plans to include $28.0 million in the FY 1992 budget to complete construction.

For 1991, projects include renovations required to meet accreditation, code and safety standards in intramural facilities and, as such, are critical to the continued operation of those programs.

Rationale for the Budget Request

The FY 1991 Request of $3,126,000 will support the critical repairs and improvements absolutely essential to maintain the current level of intramural research activity given health and safety requirements. The request does not provide for any funds for program growth, other than improved laboratory facilities for HIV/AIDS research. This amount has been included as a lump sum for repairs and improvements in the PHS 1991 Facilities Plan. The funding provided in the past few years has partially funded routine maintenance on intramural facilities. It has not permitted required repairs and improvements to meet increasingly stringent health and safety requirements, assure compliance with American Association of Laboratory Animal Care (AALAC) standards, nor the remodeling required to accommodate the next generation of research protocols. The request is composed of a number of critical repair and improvement projects, and the HIV/AIDS laboratory improvement project, described below.

o	NIAAA - Remodel the chemical waste storage facilities at the Flow Laboratory Building and enhance the Mass Spectrography Laboratory on the NIH campus.	$125,000
o	NIMH - Phased repairs and improvements to the patient care units of the NIH Clinical Center; improvements to Animal Behavior Modules in NIH research laboratories to meet required standards; major improvements to the temporary primate facility NIH building 14D; phased upgrading of NIH Clinical Center Laboratories with such improvements as new, secure, locking cabinets to replace open shelf storage of chemicals, drugs and valuable items, painting; plumbing modifications; electrical upgrades; installation of fume hoods and installation of wall mounted racks for incubators and tissue culture work to make more floor space available; and finally, therapeutic community and patient safety repairs to the W.A. White Building.	$1,281,000
o	NIDA - Improve the hazardous waste storage facilities at the Addiction Research Facility, Francis Scott Key Hospital.	$120,000
o	HIV/AIDS - Multiple intramural research laboratories require extensive renovation to sustain HIV/AIDS basic and applied projects. Exiting laboratory facilities do not meet biological safety standards for handling HIV infected samples and viral concentrates. Depending on the research protocol, current facilities must be upgraded to either P2 or P3 biosafety levels. Specific modifications include: specialized ventilation systems, airlocks, airflow regulators, biological safety cabinets, sterilization equipment, refrigeration units, specialized flooring systems and specialized work surfaces which can be sterilized. Fifteen laboratory modules will be improved in FY 1991.	$1,600,000
	Total	$3,126,000

The first phase of construction of a new child health/neurology primate facility on the NIH campus (Building 49) was funded by a $13.8 million appropriation in FY 1989. The building will provide additional space for consolidation of neuroscience activities, including the intramural facilities of NIMH and NIAAA. The 1991 ADAMHA President's Budget does not request money for the further construction of Building 49, since it is included in the NIH budget.

Building 49 will consolidate ADAMHA intramural facilities which are now located at several sites. The benefits of this consolidation of research facilities are twofold: (1) the improved scientific collaboration and cross fertilization of ideas for scientists working on common issues in similar environments; (2) the ability of scientists to utilize the unmatched existing instrumentation and scientific support environment.

VIII. Office of the Administrator

Authorizing Legislation - Section 301 of the Public Health Service Act

	FY 1990 Estimate	FY 1991 Estimate	Increase or Decrease
Office of the Administrator:			
A. Prog Mgmt & Support......	$8,440,000	$10,494,000	+$2,054,000
B. SEH Work Comp. Fund......	1,834,000	1,895,000	+61,000
Total Program Mgmt......	10,274,000	12,389,000	+2,115,000
(HIV/AIDS non-add)....	---	(909,000)	(+909,000)
FTE................	168	173	+5
(HIV/AIDS non-add)	(3)	(3)	(---)

1991 Authorization........................ Indefinite

Purpose and Method of Operation

The Office of the Administrator (OA) provides general operational support to the ADAMHA institutes and offices and serves as a focus for meeting our national leadership responsibilities in the areas of alcoholism, drug abuse, and mental health. The ADAMHA HIV/AIDS Advisory Board is also supported in the OA.

A. Program Management and Support

The OA provides leadership for agency-wide research policy, communicates the extraordinary findings that are occurring in the ADM fields, and reinforces ADAMHA's commitment to reducing the prevalence of ADM disorders. The OA also coordinates ADAMHA policy, provides oversight of the Federal Technology Transfer Act activities, and coordinates investigations of scientific misconduct. With the increased national emphasis on the War on Drugs, the OA provides extensive support to organizations such as the Office of National Drug Control Policy, as well as the agency's four components dealing with substance abuse programs. In addition, the OA provides administrative and management support to the entire agency through its centralized personnel services as well as EEO, space and property management, and telecommunications and ADP activities. Included within the OA are the salaries and associated support costs for staff who provide for the coordination of the agency's programs including contract and grant review and award policies, agency program planning, development and implementation, and other administrative and technical staff. The HIV/AIDS Advisory Board is responsible for the development of long range comprehensive plans and strategies for the ADAMHA HIV/AIDS Program, and for the oversight, coordination, preparation, and submission of the ADAMHA HIV/AIDS Plan.

Funding levels for the past five fiscal years were as follows:

1986	$7,292,000
1987	$8,620,000
1988	$7,520,000
1989	$7,512,000
1990	$8,440,000

B. SEH Workers' Compensation

ADAMHA's payments for St. Elizabeths Worker's Compensation are required by the statute that transferred the hospital to the District of Columbia, Public Law 98-621, which states "...An individual receiving compensation for work injuries pursuant to chapter 81 of title 5, United States Code, shall 1) continue to have the claims adjudicated and the related costs paid by the Federal Government until such individual recovers and returns to duty; 2) if medically recovered and returned to duty, have any subsequent claim for the recurrence of the disability determined and paid under the provisions of Title XXIII of the District of Columbia Comprehensive Merit Personnel Act of 1978."

Funding levels for the past five fiscal years were as follows:

1986	$0
1987	$0
1988	$0
1989	$1,863,000
1990	$1,834,000

This activity is jointly administered by the Department of Labor's (DOL) Federal Employees' Compensation Fund and the St. Elizabeths transition staff. The Fund makes benefit payments because of injury or death of Federal employees for which it is reimbursed two fiscal years after payments are made. ADAMHA has implemented a program of 100 percent review of these claims. This assures that continuing case management procedures are in place. Questionable cases are promptly brought to the attention of the DOL.

Rationale for the Budget Request

The FY 1991 request of $12.4 million and 173 FTEs will provide an increase of $2.1 million and 5 FTEs over the FY 1990 level. These 5 additional FTEs will strengthen the Office of the Administrator's role in coordination and implementation of the ADAMHA substance abuse treatment initiatives. The large budget increases in FY 1990 and FY 1991, in addition to necessary coordination with ONDCP and ADAMHA's four major components place demands for increased support on OA elements such as the Division of Personnel Management(DPM), and the Division of Grants and Contract Management (DGCM). For instance, one in every three contracts require review and approval by DGCM. Support costs a contract requirements for evaluation of the ADAMHA HIV/AIDS program, amount to $909,000 appear in the OA for the first time; this support is required fo the mandated ADAMHA HIV/AIDS related activities including support for the HIV/AIDS Advisory Board which represents the agency-level focal point for issues requiring coordination and negotiation efforts with other PHS Agencies and other outside groups. In FY 1991 there is a substantial contract requirement in OA associated with the HIV/AIDS program. ADAMHA will contract with the Institute of Medicine, National Academy of Sciences, to review and evaluate HIV/AIDS research and services programs within our five principle components.

Summary of Changes:

The FY 1991 request of $12,389,000 reflects an increase of $2,115,000 over the comparable FY 1990 level. The increases are identified as follows:

Built-in Increases	
Jan. 1990 pay annualization............................	+$69,000
Jan. 1991 pay increase.................................	+278,000
Within grade increases.................................	+118,000
Increased PHS Service & Supply Fund....................	+33,000
Increased FTS costs....................................	+4,000
Increased FERS costs...................................	+26,000
Working Capital Fund transfer..........................	+3,000
Increased Rental Payments to GSA.......................	+50,000
Increased Social Security (FICA).......................	+22,000
Increased SEH Workers Comp. Fund.......................	+61,000
Increased cost of non-pay items including laboratory materials and other supplies..............	+2,000
Restoration of program cuts used to used to absorb Jan. 1990 pay raise...................	+207,000
One extra day of pay...................................	+33,000
Subtotal, Built-in Increases........................	+906,000
Program Increases	
Salaries & Program Support for 5 additional FTEs......	+300,000
Increased HIV/AIDS Salary/Contract costs..............	+518,000
Increase for HIV/AIDS Advisory Board (non-pay costs only)..................................	+391,000
Subtotal, Program Increases.........................	+1,209,000
Total, Increases..................................	+2,115,000

Alcohol, Drug Abuse, and Mental Health

New Positions Requested

		1991	
NIDA Intramural Research	**Grade**	**Number**	**Annual Salary**
Pharmacologist......................	GS-15	1	$59,216
Medical Officer......................	GS-14	1	50,842
Pharmacologist......................	GS-14	1	50,842
Program Analyst......................	GS-13	1	42,601
Biologist......................	GS-13	2	85,202
Psychologist......................	GS-13	1	42,601
Staff Assistant......................	GS-11	1	29,891
Bio Lab Technician......................	GS-07	2	40,390
Secretary......................	GS-06	1	18,174
Clerk Typist......................	GS-04	1	14,573
		12	$434,332
NIDA Research Management & Support			
Medical Officer......................	GS-14	4	$203,368
Health Science Administrator........	GS-14	2	101,684
Pharmacologist......................	GS-14	4	203,368
Psychologist......................	GS-14	4	203,368
Medical Writer......................	GS-14	1	50,842
Toxicologist......................	GS-14	2	101,684
Neuroscientist......................	GS-13	2	85,202
Program Analyst......................	GS-13	1	42,601
Technology Transfer Officer.........	GS-13	1	42,601
Medical Writer......................	GS-13	1	42,601
Toxicologist......................	GS-13	2	85,202
Chemist......................	GS-13	2	85,202
Psychologist......................	GS-12	2	71,650
Program Analyst......................	GS-12	1	35,825
Staff Assistant......................	GS-12	1	35,825
Public Health Advisor..............	GS-12	1	35,825
Secretary......................	GS-05	2	32,610
Clerk Typist......................	GS-04	2	29,146
		35	$1,488,604
OSAP Prevention Management and Support			
Deputy Associate Administrator......	GS-15	1	$59,216
Committee Management Officer........	GS-13	1	42,601
Grants Management Specialist........	GS-13	1	42,601
Public Health Analyst..............	GS-13	3	127,803
Contract Specialist..............	GS-12	1	35,825
Public Health Analyst..............	GS-12	3	107,475
		10	$415,521
OA Program Management and Support			
Grants Policy Officer.................	GS-13	1	$42,601
Program Analyst......................	GS-12	2	71,650
Personnel Specialist.................	GS-11	2	59,782
		5	$174,033

Alcohol, Drug Abuse, and Mental Health

Detail of Permanent Positions

	1989 Actual	1990 Estimate	1991 Estimate
ES-6	2	2	3
ES-5	5	5	6
ES-4	27	26	27
ES-3	7	5	6
ES-2	0	0	0
ES-1	2	2	3
Subtotal	43	40	45
GM/GS-15	118	119	121
GM/GS-14	174	182	201
GM/GS-13	147	168	187
GS-12	123	144	154
GS-11	121	134	137
GS-10	3	4	6
GS-9	122	127	132
GS-8	47	54	57
GS-7	186	207	211
GS-6	109	114	116
GS-5	53	58	60
GS-4	20	24	29
GS-3	5	6	8
GS-2	1	2	4
GS-1	0	1	3
Subtotal	1,229	1,344	1,426
Grades Established by the Public Health Service Act of 1955 (42.U.S.C. 207)			
CC-08/09 ($55,012 to $75,474)	0	0	0
CC-07 ($45,710 to $66,614)	1	1	2
CC-06 ($33,878 to $58,527)	48	52	59
CC-05 ($27,095 to $47,753)	37	42	45
CC-04 ($22,842 to $39,931)	12	20	26
CC-03 ($21,217 to $34,534)	0	3	5
CC-02 ($18,510 TO $25,626)	1	2	3
CC-01 ($16,067 TO $20,215)	0	0	0
Subtotal	99	120	140
Ungraded	0	0	0
TOTAL FULL TIME PERM POSITIONS	1,371	1,504	1,611
UNFILLED POSITIONS, EOY	0	0	0
TOTAL FULL TIME PERM EMPLOYMENT, EOY	1,371	1,504	1,611

Alcohol, Drug Abuse and Mental Health

Advisory and Assistance Services

The Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) supports research, treatment, and prevention activities through the employment of advisory and assistance services (AAS). Advisory committees and appointive consultants are employed to make recommendations on ADAMHA's program directions and to provide advice which augments ADAMHA's knowledge of state-of-the-art treatment and prevention research.

NIMH employs consultant services to assist in conducting special studies and analyses to compile a wide range of information on the homeless and mentally ill. Current efforts include a targeted sample survey of new mental health facility types (eg. rehabilitation facilities, board, and care homes) that will identify important gaps in data reporting of traditional State and county mental hospitals and will allow for more expedient collection and dissemination of data, evaluation of demonstration projects for homeless adults with mental illness and the evaluation of present and future mental health research training needs. Technical services are also used to review and assess NIMH's past CASSP (Child and Adolescent Service System Program) evaluation activities at the national level. In addition, NIMH enlists consultants to provide technical expertise and insights for better understanding complex issues in the areas of policy review, program evaluation and development services.

NIDA utilizes management and support services to sustain such activities as committees on drug abuse in the workplace; the National Laboratory Certification Program; and the Mandatory Guidelines for Federal Workplace Drug Testing Programs required under Public Law 100-71. In addition, NIDA enlists assistance services to conduct special studies and analyses to compile a wide range of information on topics such as adolescent drug abusers, drug abuse in the workplace, the effectiveness of innovative State drug treatment programs (eg. pregnant women and group home programs), primary care resources for drug abusers, and the impact of social and economic issues on the structure and financing of drug abuse treatment programs. These studies contribute significantly to ADAMHA's program efficiency and effectiveness. Since some of these studies will be conducted in FY 1990 exclusively, funding requirements increase between FY 1989 and FY 1990 but decrease in FY 1991.

NIAAA employs individual consultants and experts to evaluate homeless demonstration programs. The consultants provide technical expertise currently unavailable within NIAAA. Strengthening current evaluations and implementing new evaluations involving research demonstration grants for homeless persons with substance abuse problems has increased the need for evaluation contracts. Management and support services are used to support investigations on the impact of sensitive alcohol-related policy decisions such as drinking and driving laws and public and private sector financing of alcoholism treatment in order to provide the Secretary, Congress, and other decisionmakers with timely and comprehensive information on alcohol-related problems.

OSAP also uses consultants to evaluate and improve substance abuse prevention and intervention programs. Increases in consultant services utilized by OSAP result from additional appropriations for existing programs (eg. High Risk

Youth Demonstration Grants) and the establishment of new programs such as Pregnant Women and Their Infants, Community Youth Activity, the National Training System, and the Community Partnership Program.

The formation of the Office for Treatment Improvement (OTI) has also increased the need for consultant services. In order to develop treatment improvement programs and services, OTI requires the assistance of experts while it recruits permanent employees. Technical services are employed to assist OTI in its mission to provide Federal financial assistance and program expertise to State and local alcohol, drug abuse, and mental health administrators and clinicians. Since OTI is a new office, initially it will need to contract for advisory and assistance services in order to fulfill its mission.

AAS--Salaries and Expenses

			FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
I.	Contractual Services				
	Individual Experts & Consultants	B.A.	$450,000	$1,691,000	$1,351,000
		Oblig.	412,000	1,691,000	1,351,000
		Outlays	378,000	1,539,000	1,054,000
	Studies, Analyses & Evaluations	B.A.	1,440,000	9,360,000	4,349,000
		Oblig.	1,291,000	9,360,000	4,349,000
		Outlays	1,690,000	7,476,000	5,759,000
	Management & Professional Support Svcs.	B.A.	1,023,000	2,029,000	1,046,000
		Oblig.	879,000	2,029,000	1,046,000
		Outlays	437,000	1,022,000	709,000
	Engineering & Technical Services	B.A.	750,000	640,000	285,000
		Oblig.	723,000	640,000	285,000
		Outlays	341,000	582,000	258,000
	Subtotal	B.A.	3,663,000	13,720,000	7,031,000
		Oblig.	3,305,000	13,720,000	7,031,000
		Outlays	2,846,000	10,619,000	7,780,000
II.	Personnel Appointments	B.A.	137,000	373,000	253,000
		Oblig.	76,000	373,000	253,000
		Outlays	76,000	368,000	256,000
III.	Advisory Committees	B.A.	---	88,000	75,000
		Oblig.	---	88,000	75,000
		Outlays	---	86,000	75,000
	TOTAL, ADAMHA	B.A.	3,800,000	14,181,000 [1]	7,358,000
		Oblig.	3,381,000	14,181,000 [1]	7,359,000
		Outlays	2,922,000	11,073,000	8,111,000

[1] Of this amount, $12,000,000 is from the L/HHS Appropriation; $2,181,000 is from the DOT Appropriation.

Alcohol, Drug Abuse and Mental Health Administration

HIV/AIDS Funding by Function	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
I. Basic Science Research:			
A. Biomedical Research:			
2. Immunology........................	$12,669,000	$21,384,000	$26,589,000
5. Animal models & related studies..	449,000	717,000	750,000
Subtotal........................	13,118,000	22,101,000	27,339,000
B. Neuroscience and Neuropsychiatric Research.........	10,363,000	16,524,000	19,114,000
C. Behavioral Research:			
1. Mechanisms of behavioral and behavior change............	13,087,000	19,770,000	23,610,000
2. Prevention of high-risk behaviors (behavioral and pharmacologic interventions).................	94,105,000	100,925,000	97,107,000
Subtotal.....................	107,192,000	120,695,000	120,717,000
F. Research Enhancement:			
1. Training.........................	2,307,000	4,338,000	5,675,000
Total, Basic Science Research.	132,980,000	163,658,000	172,845,000
II. Risk Assessment and Prevention:			
A. Surveillance:			
2. HIV surveys (incidence and prevalence)....................	641,000	1,600,000	1,810,000
3. Knowledge, attitudes, behaviors..	975,000	2,700,000	3,190,000
Subtotal........................	1,616,000	4,300,000	5,000,000
B. Population-Based Research: Natural History, Transmission, Risk Factors:			
1. Transmission......................	4,328,000	8,500,000	9,980,000
2. Natural history and co-factors...	11,172,000	13,107,000	15,040,000
Subtotal........................	15,500,000	21,607,000	25,020,000
C. Information and Education/Preventive Services:			
1. High risk or infected persons....	651,000	950,000	986,000
4. General public & special programs	3,535,000	3,620,000	3,685,000
5. Health-care workers & providers..	9,109,000	9,572,000	10,033,000
Subtotal........................	13,295,000	14,142,000	14,704,000
Total, Risk Assessment.......	30,411,000	40,049,000	44,724,000
IV. Clinical Health Services Research and Delivery:			
A. Services:			
1. Commun. & health center services.	8,945,000	8,940,000	8,446,000
D. Research.............................	1,000,000	2,000,000	2,054,000
Total, Clinical Health Services...	9,945,000	10,940,000	10,500,000
V. PHS-wide Activities:			
C. Construction	---	---	1,600,000
Total, ADAMHA.....................	173,336,000	214,647,000	229,669,000

Alcohol, Drug Abuse, and Mental Health Administration
Summary by Mechanism—HIV/AIDS
(Dollars in thousands)

	1989 Actual		1990 Appropriation		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Project Grants:								
Continuations...........	99	22,612	121	32,207	121	32,207	234	62,587
Admin. Supplements......	(7)	263	—	—	—	—	—	—
New/Competing Combined..	74	17,487	159	37,646	159	37,646	96	24,146
Subtotal, RPG.........	173	40,362	280	69,863	280	69,853	330	86,733
Research Centers..........	11	17,471	14	22,899	14	22,899	14	22,979
Other Research:								
Research Career Programs.	8	441	20	1,322	20	1,322	29	1,952
Cooperative Agreements...	1	115	4	2,325	4	2,325	8	5,296
Small Grants.............	4	154	2	145	2	145	6	449
Subt., Other Research..	13	710	26	3,792	26	3,792	43	7,696
Total, Research Grants	197	58,543	320	96,544	320	96,544	387	117,408
Research Training:	FTTP		FTTP		FTTP		FTTP	
Individual Awards........	5	136	31	751	31	751	45	1,224
Institutional Awards.....	84	2,171	134	3,587	134	3,587	167	4,451
Total, Res Training...	89	2,307	165	4,338	165	4,338	212	5,675
	No.		No.		No.		No.	
Res. and Dev. Contracts...	8	3,552	18	7,587	18	7,587	22	13,847
Total, Extramural Res...		64,402		108,469		108,469		136,930
	FTE		FTE		FTE		FTE	
Intramural Research.......	26	7,629	38	12,646	38	12,646	50	13,832
Res. Mgmt. & Support......	52	10,420	86	11,977	86	11,977	95	13,052
Total, Research.........	(78)	82,451	(123)	133,092	(123)	133,092	(145)	163,814
	No.		No.		No.		No.	
Drug Abuse Demonstrations.	83	90,885	74	81,555	74	81,555	52	63,346
Buildings & Facilities....	—	—	—	—	—	—	—	1,600
Off. of the Administrator:	FTE		FTE		FTE		FTE	
Prog. Mgmt. & Support...	(2)	—	(3)	—	(3)	—	(3)	909
Total, ADAMHA.......		173,336		214,647		214,647		229,669
FTE...............		80		126		126		148

Alcohol, Drug Abuse, and Mental Health Administration
Summary by Mechanism—NIMH HIV/AIDS
(Dollars in thousands)

	1989 Actual		1990 Appropriation		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Project Grants:								
Continuations...........	37	8,328	61	15,874	61	15,874	110	30,171
New/Competing Combined..	45	10,809	68	15,744	68	15,744	29	7,130
Subtotal, RPG.........	82	19,137	129	31,618	129	31,618	139	37,301
Research Centers..........	5	14,077	5	17,117	5	17,117	5	17,029
Other Research:								
Research Career Programs.	4	225	7	549	7	549	8	629
Cooperative Agreements...	—	—	3	2,125	3	2,125	7	4,995
Small Grants.............	3	110	2	145	2	145	6	449
Subt., Other Research...	7	335	12	2,819	12	2,819	21	6,073
Total, Research Grants	94	33,549	146	51,554	146	51,554	165	60,403
	FTTP		FTTP		FTTP		FTTP	
Research Training:								
Individual Awards........	4	115	20	512	20	512	21	598
Institutional Awards.....	79	2,015	105	2,898	105	2,898	119	3,341
Total, Res Training...	83	2,130	125	3,410	125	3,410	140	3,939
	No.		No.		No.		No.	
Res. and Dev. Contracts...	3	219	7	612	7	612	7	632
Subtotal, Extram. Res...	—	35,898	—	55,576	—	55,576	—	64,974
	FTE		FTE		FTE		FTE	
Intramural Research.......	17	5,377	25	6,333	25	6,333	25	6,585
Res. Mgmt. & Support......	10	7,098	21	6,445	21	6,445	21	6,577
Total, Research.........	27	48,373	46	68,354	46	68,354	46	78,136
Total, NIMH...........		48,373		68,354		68,354		78,136
FTE.................		27		46		46		46

Alcohol, Drug Abuse, and Mental Health Administration

Summary by Mechanism—NIDA HIV/AIDS

(Dollars in thousands)

	1989 Actual		1990 Appropriation		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Project Grants:								
Continuations...........	47	11,606	51	14,348	51	14,348	104	27,702
Admin. Supplements......	(4)	219	—	—	—	—	—	—
New/Competing Combined..	25	5,866	78	19,067	78	19,067	63	16,111
Subtotal, RPG.........	72	17,691	129	33,415	129	33,415	167	43,813
Research Centers..........	5	2,750	8	5,082	8	5,082	8	5,250
Other Research:								
Research Career Programs.	3	156	12	713	12	713	20	1,263
Cooperative Agreements...	1	115	1	200	1	200	1	300
Small Grants.............	1	41	—	—	—	—	—	—
Subt., Other Research...	5	312	13	913	13	913	21	1,563
Total, Research Grants	82	20,753	150	39,410	150	39,410	196	50,626
Research Training:	FTTP		FTTP		FTTP		FTTP	
Individual Awards........	—	—	2	52	2	52	14	364
Institutional Awards.....	—	—	24	548	24	548	43	965
Total, Res Training...	—	—	26	600	26	600	57	1,329
	No.		No.		No.		No.	
Res. and Dev. Contracts...	3	3,033	9	6,650	9	6,650	13	12,879
Subtotal, Extram. Res...		23,786	—	46,660	—	46,660	—	64,834
	FTE		FTE		FTE		FTE	
Intramural Research.......	1	1,294	3	4,814	3	4,814	15	5,669
Res. Mgmt. & Support......	38	2,868	60	5,053	60	5,053	70	5,972
Total, Research.........	39	27,948	63	56,527	63	56,527	85	76,475
	No.		No.		No.		No.	
Drug Abuse Demonstrations.	83	90,885	74	81,555	74	81,555	52	63,346
Total, NIDA...........		118,833		138,082		138,082		139,821
FTE..................		39		63		63		85

Alcohol, Drug Abuse, and Mental Health Administration
Summary by Mechanism—NIAAA HIV/AIDS
(Dollars in thousands)

	1989 Actual		1990 Appropriation		1990 Estimate		1991 Estimate	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Research Project Grants:								
Continuations...........	15	2,678	9	1,985	9	1,985	20	4,714
Admin. Supplements......	(3)	44	—	—	—	—	—	—
New/Competing Combined..	4	812	13	2,835	13	2,835	4	906
Subtotal, RPG.........	19	3,534	22	4,820	22	4,820	24	5,619
Research Centers..........	1	644	1	700	1	700	1	700
Other Research:								
Research Career Programs.	1	60	1	60	1	60	1	60
Small Grants.............	—	3	—	—	—	—	—	—
Subt., Other Research...	1	63	1	60	1	60	1	60
Total, Research Grants	21	4,241	24	5,580	24	5,580	26	6,379
Research Training:	FTTP		FTTP		FTTP		FTTP	
Individual Awards........	1	21	9	187	9	187	10	262
Institutional Awards.....	5	156	5	141	5	141	5	145
Total, Res Training...	6	177	14	328	14	328	15	407
	No.		No.		No.		No.	
Res. and Dev. Contracts...	2	300	2	325	2	325	2	336
Subtotal, Extram. Res...		4,718	—	6,233	—	6,233	—	7,122
	FTE		FTE		FTE		FTE	
Intramural Research.......	8	958	10	1,499	10	1,499	10	1,578
Res. Mgmt. & Support......	4	454	4	479	4	479	4	503
Total, Research.........	12	6,130	14	8,211	14	8,211	14	9,203
Total, NIAAA..........		6,130		8,211		8,211		9,203
FTE.................		12		14		14		14

Alcohol, Drug Abuse, and Mental Health Administration

HIV/AIDS PROGRAM

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Budget Authority..	$173,336,000	$214,647,000	$229,669,000
FTE...............	80	126	148

OVERVIEW

The ADAMHA request for the HIV/AIDS program in FY 1991 is $229.7 million. This request is the result of in-depth programmatic review within ADAMHA, and represents a broad strategy for supporting and conducting research directed toward the problems of AIDS and HIV infection.

Increases for the HIV/AIDS budget of $15 million support expansion of the following functional areas:

- Biomedical Research (+$5.2 million)
- Neuroscience and Neuropsychiatric Research (+$2.6 million)
- Research Training (+$1.3 million)
- Risk Assessment and Prevention (+$4.7 million)
- Buildings and Facilities (+$1.6 million)

Within the Federal scientific community, the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA), by history and design, possesses a unique programmatic focus and expertise on brain and behavior as they relate to the major mental and addictive disorders. Thus, ADAMHA's scientific contribution to the Federal HIV/AIDS effort is based on knowledge and experience unique to the research activities of this Agency.

Combining expertise with current needs, ADAMHA conducts research to better understand, assess, and treat the neuropsychiatric, behavioral, and psychosocial aspects of HIV infection and AIDS. The Agency HIV/AIDS program includes basic research at the biological, behavioral, and psychological level, as well as clinical services and intervention research.

Concerns about the mental health aspects of HIV/AIDS emerged early in the history of the epidemic, with the observation of clinical symptoms such as anxiety and depression which were perceived as an understandable reaction to the diagnosis of a stigmatizing and fatal illness. Progressive impairment of the central nervous system (CNS) seen in many HIV/AIDS patients initially was thought to be the result of opportunistic infections or lymphomas. However, it has become evident that the CNS disabilities associated with HIV infection could not be accounted for only by the presence of these opportunistic conditions.

More recently, scientific evidence has shown that the HIV virus, identified as the etiologic agent for AIDS, is neurotropic and enters the CNS early in the course of HIV infection. Clinical observations have demonstrated that CNS impairment is common by the time the disease has progressed to AIDS and that the brain remains a reservoir for continual reinfection of susceptible cells. Hence, any ultimately successful treatment for HIV infection must penetrate the CNS, and do so in effective concentrations which can kill the virus and render it non-toxic.

More information regarding the biological and molecular mechanisms underlying the effects of HIV infection in the CNS is urgently needed, both to understand AIDS Dementia and to develop appropriate strategies for treating HIV infection and AIDS. At the same time, research efforts must focus on the interaction between the neural, immune, endocrine, and behavioral aspects of this disease in order to better understand the complicated mechanism of HIV-related neuropathogenesis.

Since no vaccine exists for HIV/AIDS and none is expected in the immediate future, research is critically needed on mechanisms of behavior change and preventive intervention strategies to help high risk individuals modify or avoid specific sexual and drug-using behaviors that place them at risk for becoming infected.

Given the recent demographic shift in the epidemic, the ADAMHA HIV/AIDS-related research will place particular emphasis on the needs of special populations at higher risk for HIV infection. Minorities are over-represented among drug abusers with HIV/AIDS and they, as well as children and adolescents, and the homeless and seriously mentally ill are all at particular risk for both drug abuse and HIV/AIDS.

Drug addiction must be curtailed if the spread of HIV is to be controlled. Intravenous drug abuse is the second leading risk factor for HIV/AIDS in adults and the leading risk factor for HIV/AIDS in children and heterosexual adults. Non-intravenous drugs, also, have emerged as critical in HIV transmission, via increased high risk sexual contact associated with many of these drugs. That is, HIV infection is likely to spread rapidly among sexually promiscuous drug abusers--even among those who do not use drugs intravenously--given the increasing practice of trading sex for drugs.

ADAMHA's highest priorities include developing increasingly effective pharmacologic agents to treat drug addiction and increasingly effective behavioral interventions to prevent or stop drug abuse. Other priorities include preventing the initiation of intravenous drug use and expanding techniques to bring previously hard-to-reach drug abusers into treatment. To support these intervention efforts, more basic research will be undertaken on:

- the extent of intravenous drug abuse and high risk behaviors;
- factors that contribute to initiation, maintenance, and elimination of high-risk drug use and sexual behaviors;

- factors that contribute to the progression of AIDS related conditions in intravenous drug abusers; and
- the effects of drugs of abuse and medications used in drug abuse treatment on the immune system.

Consistent with the recommendations of the President's Commission on the HIV Epidemic, the Second Public Health Service AIDS Prevention and Control Conference Report, and the Institute of Medicine, the ADAMHA HIV/AIDS program continues to emphasize a balance between behavioral and neuroscience research in the expansion of ongoing efforts and in new initiatives.

STAFFING REQUIREMENTS

In FY 1990, a 57 percent increase over the number of FTEs in FY 1989 helped provide the impetus for further expansion of the ADAMHA HIV/AIDS program. The additional 22 FTEs will staff program expansions and new initiatives in NIDA programs in FY 1991.

In FY 1990 NIMH supported 46 FTEs. Three staff were added in FY 1990 to handle expanded grant review activities; one neuroimmunologist was supported to direct the behavioral neuroimmunology initiative; a neuropsychologist was added to coordinate the integration of the standard battery for assessing cognitive and neuropsychologic dysfunction across federally funded studies; and one FTE was added to develop an HIV/AIDS minority initiative.

RESEARCH PROGRAM: EXPANSIONS AND NEW EFFORTS

I. BASIC SCIENCE RESEARCH

A. Biomedical Research

The increase in NIMH's extramural research budget will allow a major emphasis on investigation in the areas of neuroimmunology and psychoneuroimmunology. Prior research has demonstrated that the HIV virus affects both the CNS and the immune system, ultimately leading to progressive immunosuppression and brain damage. Currently, there is a paucity of information on the factors that influence the development and clinical course of HIV-related CNS impairment. Scientific evidence supports the existence of reciprocal communication between the nervous and the immune system. Impairment of the regulatory feedback processes between the CNS and immune system could affect an individual's susceptibility to the neurotropic effects of the HIV virus, as well as the progression of the disease and development of more severe neurological symptoms. In FY 1991, NIMH will issue a Program Announcement soliciting research grant applications to investigate the basic cellular and molecular mechanisms that regulate the communication pathways between the brain and the immune system and the relevance of this interaction to human health and disease.

Research priorities in this area will include studies on:

- further definition of hormones, neurotransmitters and immune mediators function as intermediary substances between the nervous and immune system;
- the role of nervous system connections in the development and differentiation of immune tissues and organs;
- the function of peptide and neurotransmitter receptors on immunocompetent cells;
- the role of the functional impairment of the immune system caused by HIV infection in the progressive deterioration of the CNS in AIDS dementia and, conversely,
- the influence of progressive CNS damage on immune system impairment in HIV positive individuals.

NIMH will continue to encourage research which investigates how psychological, behavioral, and immunological variables and their interrelationships can affect the individual's immunity and health status. Of particular interest will be studies on the relationship between stress, depression, and seropositivity, and its influence on the resistance of the immune system to HIV or opportunistic infections.

A major concern at NIDA is the effect of drugs of abuse and treatment medications on immune functioning. Drug abuse may increase susceptibility to HIV infection as well as enhance disease progression. Immunological research is underway to study the effects of drugs of abuse on the immune system and the interaction of HIV with these effects. Susceptibility to initial infection with HIV and the course of the disease will be assessed. Immunological factors influencing the susceptibility of drug-abusing minority populations are particularly important since these populations are disproportionately affected. Studies in drug-abusing populations will attempt to separate other contributions of the drug-abusing life style to the course of HIV infection (e.g., malnutrition; other infections) from the primary effects of the drugs.

Clinical studies will be expanded to examine the immunologic effects of opiates, marijuana, and other abused drugs on immune functioning. These studies will include effects on the immune system of

- specific drugs of abuse;
- patterns of drug abuse;
- medical conditions and illness associated with drug abuse;
- pharmacotherapeutic agents used for HIV and drug abuse treatment (e.g., AZT, methadone, naltrexone, LAAM, buprenorphine, clonidine, antidepressants);
- biological and/or genetic factors known to be involved in drug abuse (e.g., age, sex, racial/ethnic group); and
- environmental factors such as nutrition and exposure to toxic agents. Additional research on the roles of psychosocial stressors and HIV-induced organic stress on immune functioning is also important.

Preclinical research will continue to support and complement clinical studies. Research emphases will include:

- the identification and study of physiological, biochemical and immunological mechanisms by which drugs of abuse affect the progress of HIV-induced brain degeneration;
- the effects of stress on the immune system and endocrine function, and the effects of abused drugs on stress factors;
- definition, characterization and approaches to evaluating effects of abused drugs on cellular toxins, lymphokines, receptors and other cellular functions affected by HIV infection; and
- elucidation of the hypothalamic and immunologic control of drug-modified HIV neurologic changes as reflected by physiologic, behavioral, genetic, and biochemical measures.

In intramural research, current studies examining the immunology of delta-9-THC administration will be expanded to examine the immunologic effects of other drugs of abuse. Studies with opiates are also underway and will be expanded to include investigations of cocaine's effect on lymphocyte functioning in mice.

HIV interaction with certain peptides in the CNS are also being explored and will continue to be expanded in a series of animal studies. Expanding these areas of research, which involve both human and animal subjects, requires additional support for subject recruitment, subject care and assessment, animal protocols, equipment and maintenance, and data management/analysis.

Acute and chronic alcohol consumption may increase susceptibility to HIV infection by suppressing immune function. NIAAA will expand ongoing research examining alcohol's effects on fetal development; alcohol as a cofactor in the acquisition of HIV infection by the fetus; and alcohol's possible role in increasing susceptibility to other infections on HIV neonates. NIAAA also will expand studies on biological and molecular mechanisms underlying the effect of alcohol on the immune system in correlation with susceptibility to HIV infection and progression of disease. To overcome the inherent difficulties in studying the pathobiology of alcohol and other drug actions on the immune system, there will be continued effort to develop animal models focusing on the acute and chronic effects of alcohol and other drugs on lymphocyte characteristics. The FY 1991 budget requests an increase of $166,000 for this work.

B. Neuroscience and Neuropsychiatric Research

The proposed NIMH increase of $1.6 million for FY 1991 will support research on:

- the incidence, prevalence, and natural history of AIDS Dementia Complex (ADC);
- mechanisms of HIV neuropathogenesis;
- CNS effects and neuropsychologic and neuropsychiatric manifestations of HIV in animal and human models;
- further development of natural history studies of HIV infection; and
- the development of therapeutic agents for treatment of HIV infection in the brain.

Other FY 1991 priorities include:

- incorporation of the NIMH-developed standardized battery to assess HIV-related cognitive sequelae across sites in NIMH-supported HIV/AIDS research programs;
- expansion of efforts initiated in FY 1990 related to the assessment of neurodevelopmental delays in children and CNS involvement in pediatric AIDS; and
- new efforts to develop functional assessment measures.

In FY 1991, NIMH plans to expand the number of research sites involved in cross-site comparisons of cognitive and neuropsychologic dysfunction with particular focus on special populations such as minorities and children. Efforts to relate information obtained on neuropsychological assessment in asymptomatic HIV infected individuals to actual performance on functional measures will be enhanced.

ADC may be caused by direct HIV infection of the brain or by products released by macrophage or the virus. The theory on direct infection of the brain has gained rapid acceptance since HIV is similar to other slow viruses that are neurotropic. Data has emerged documenting the clinical pathologic correlates of dementia in AIDS patients where no space-occupying tissue or destructive lesion was identified. However, other theories have been proposed to explain the neurological pathology in HIV infection. HIV-related immunodysfunction may stimulate the production of neurotoxic factors that can directly or indirectly damage the nervous system; it may cause brain cell abnormality by interfering with the binding of neurotropic factors; or, autoimmune phenomena may be responsible for some of the nervous system lesions caused by HIV. Since none of these mechanisms has been definitely ascertained, further research in this area is needed. This area of investigation will be significantly expanded in FY 1991.

In FY 1991, intramural research studies will be expanded to develop animal models and to further develop and test agents that may be used to treat HIV infection, including HIV infection in the brain.

In the NIMH intramural research program, approximately 50 percent of the AIDS research is directed toward understanding AIDS Dementia Complex (ADC), including investigation of virus/CNS interactions, cognitive dysfunction and dementia associated with AIDS, and treatment of the HIV effects on the brain. Intramural scientists will continue to explore novel molecular biologic approaches to the neurotropic impact of HIV on the brain. The close interdigitation of the central nervous and immune systems, with their shared receptors and transmitters, strongly supports the involvement of the psychopharmacologists and neuroscientists in developing potential treatments for HIV. An expansion of several ongoing research efforts and a range of new studies will be initiated in the Intramural Research Program including:

- determination of the role of autoimmune phenomena in the etiology of immune disorders in mice;
- identification of the specific region of lymphocyte surface receptors that is responsible for binding and interaction with HIV;
- in vitro infection with HIV-virus of different cellular types present in the human brain;
- characterization of the molecular determinants of strains of HIV that seem to specifically attack the CNS;
- evaluation of anti-HIV substances of biological nature such as sulfated polysaccharides;
- establishment of an animal facility to study HIV in the rabbit; and
- the evaluation of behavioral, cognitive and neuromotor deficits, and brain damage as assessed by computer-assisted imaging techniques in a simian AIDS model.

To accelerate research initiated in FY 1990, the FY 1991 budget requests an increase of $146,000 to expand the IRP virology unit to allow continued development of synthetic peptides for the treatment of AIDS. Anti-infectivity assessment, while exceptionally time consuming, is critical to the development of potential therapeutic agents. To date, the IRP has relied on various collaborative relationships to obtain these evaluations. The enlarging focus of this work now far exceeds the ability of these collaborations to support these efforts.

NIMH proposes to continue a program to develop psychotherapeutic agents from natural sources which may have potential for treatment of HIV infection in the brain. The NIMH will receive plant and animal samples with the potential for yielding such drugs from the National Cancer Institute's National Products Screening Program.

Other ADAMHA Expansions in Neuroscience:

It is likely that alcohol intake could interfere with the bidirectional communication between the neuroendocrine and immune system, affecting the mechanisms leading to overt AIDS in HIV infected individuals. An increase of $42,000 in FY 1991 will enhance NIAAA's efforts in the area of neuroimmunoendocrinology to aid the development of a better understanding of the interactions between the immune and neuroendocrine systems and the role of alcohol on these systems, especially as it affects the brain and behavior.

The coordinating functions of the ADAMHA HIV/AIDS Program will be placed under neuroscience and will include 3 FTEs and the mandated ADAMHA HIV/AIDS Advisory Board.

The 3 FTEs represent the agency level focal point for issues requiring coordination and negotiation among various Agency components as well as coordination and negotiation efforts with other PHS Agencies and outside groups. These FTEs are responsible for developing long range comprehensive plans and strategies for the ADAMHA HIV/AIDS Program and, specifically, for the oversight, coordination, preparation, and submission of the ADAMHA HIV/AIDS Plan.

The ADAMHA HIV/AIDS Advisory Board was established by the Secretary under Section 222 of the PHS Act (42 U.S.C. 217a). Its purpose will be to increase input and consultation from scientific and public health experts from outside the Federal government; to provide advice on all aspects of ADAMHA activities relating to the transmission, prevention, and treatment of HIV/AIDS; and to identify opportunities for further research.

The ADAMHA HIV/AIDS Program will hold consensus conferences on emerging issues, such as early cognitive impairment with HIV infection, as deemed necessary by the Administrator and Agency HIV/AIDS Coordinator to facilitate the translation of important research findings from bench to bedside.

C. Behavioral Research

NIMH studies on the mechanisms of behavior and behavior change as related to HIV infection will focus on the patterns and determinants of high risk behaviors, and will be expanded by $5.6 million.

Studies are critically needed in the following areas: identifying determinants of the origins and maintenance of high-risk behavior; the social contexts in which risk-taking behavior occurs; the impact of affective states (e.g., depression, anxiety, social isolation) on risk behavior; effects of cognitive impairment on adherence to risk reduction guidelines; and development of more accurate methods to assess behavioral determinants, patterns of risk behaviors, and behavior change.

In FY 1991, new efforts in behavioral research will focus on special populations at risk. There is a dearth of findings on behavior change in geographical areas where HIV/AIDS infection is still moderate as well as a dearth of such findings for specific risk groups--black and Hispanic gay and bisexual men, low-income and low-education individuals, homosexual adolescents, intravenous drug users (IVDUs), and people using drugs and alcohol during sexual activity.

NIMH will expand the study of the prevention of high-risk behavior (behavioral and pharmacological interventions) to include: studies on interventions to test the efficacy of culture-specific behavioral strategies to reduce risk behaviors for HIV infection; studies of pharmacologic interventions to treat psychiatric sequelae of HIV infection; and multi-site, multi-population intervention trials. Study of pre-and post-HIV antibody test counseling is another NIMH priority.

Studies are critically needed in the following areas: intervention research guided by validated theories on behavior change; design and assessment of strategies to reduce recidivism; identification of effective channels and mechanisms for delivering HIV/AIDS prevention programs to specific, hard to reach subgroups; and development of more accurate methods to assess behavior change.

Efforts undertaken in FY 1990 will be expanded and continued through a cooperative agreement to develop a multi-site, multi-population research, intervention, and evaluation study. Different populations (e.g., black males, Hispanic females, adolescents, intravenous drug abusers) will be considered. This initiative is in direct response to recommendations of the PHS Charlottesville report, the Institute of Medicine, National Research Council, and the Presidential Commission on the HIV Epidemic.

The study of the prevention of high-risk behaviors (behavioral and pharmacologic interventions) will be expanded to include further research on the effects of psychopharmacologic agents used in the treatment of psychological sequelae of HIV infection and their interaction with anti-HIV drugs allowing a better understanding of the potential effects of these medications on risk-taking behavior. Such an understanding is critical in the development of effective HIV/AIDS prevention strategies.

NIDA's behavioral research efforts will include a total of $2.3 million in FY 1991 for expanded investigation on the behavioral factors that contribute to the initiation, maintenance, and cessation of drug abuse. These efforts will include experimental studies of intravenous drug self-administration by animals to identify factors that control drug-taking behavior, and also to assess the effectiveness of various strategies (both pharmacological and behavioral) for reducing drug-taking behavior. Research with humans will also be supported to develop procedures for:

o increasing compliance with goals of drug abuse treatment programs,

o reducing relapse after drug abuse treatment, and

o increasing compliance with HIV/AIDS prevention programs.

In the absence of a vaccine to prevent the spread of HIV infection, behavior change is the primary means of prevention. NIDA's research identifies effective behavior change strategies for drug abusing populations. One aspect of HIV/AIDS behavioral research focuses on understanding the determinants of the initiation and maintenance of risk-taking behaviors to develop interventions. Factors leading to behavioral choices; a person's response effort and complexity; the effects of drugs on behavioral responses to non-drug environmental stimuli; procedures to increase the salience of the negative consequences of risky behavior; and the positive consequences of safer practices are among numerous variables that require further investigation.

Studies with adolescents will provide a better understanding of their high risk behaviors and how to change them. Because the prevalence of AIDS among adolescents is low compared with adults, this group has received very little attention to date. Evidence suggests that, for a substantial number of AIDS cases who are now in their twenties, the actual infection event occurred during adolescence. Also, many HIV/AIDS risk behaviors (e.g., intravenous drug abuse) are initiated during adolescence. Emphasis will be placed on the identification of factors that may place minority adolescents at above average risk for HIV/AIDS. Some minority youth appear resistant to public health messages on HIV/AIDS. This may be due, in part, to the early age of beginning sexual activity, the early exposure to IV drug use, beliefs and practices regarding health maintenance, and beliefs about the future. Development of effective intervention strategies is, therefore, dependent on understanding the causes of risky behavior. Research will be expanded specifically to investigate factors that are associated with:

o the transition from non-intravenous to intravenous use of drugs;

o the initiation of high risk sexual behavior; and

o the relationship of perceptions of personal risk to drug use and sexual behavior among adolescents.

Paralleling the increasingly important role of psychopharmacology in the treatment of mental disorders in general, the use of medication plays a major and expanding role in the treatment of substance abuse. Since information in neuropharmacology and molecular biology is growing rapidly, biological interventions are expected to play a greater role in the treatment of the chronic drug abuse disorders. And, because needle sharing is typically motivated by drug dependence, NIDA's highest priority in HIV/AIDS research is the development of more effective treatments for intravenous drug abusers. A variety of pharmacological approaches are theoretically possible to control illicit drug use. At present, several pharmacological agents show promise as potentially effective medications for the treatment of opiate and nonopiate abuse; these include LAAM, buprenorphine, desipramine, and flupenthixol. Expeditious development of these agents is important for curbing the spread of HIV infection among intravenous drug abusers.

Although treatment medications hold much promise, the development of such treatments is a long term process. Development of nonpharmacological treatments is, therefore, necessary; both to fill the gaps in pharmacological treatments, and as adjuncts to such treatments as they become available. Specific research on psychosocial approaches to treatment is urgently needed. Different types of counseling and psychotherapies with drug abusers need to be evaluated. Research must identify the therapist characteristics, client characteristics and therapist/client combinations that enhance positive change in clients. Ultimately, the effectiveness of drug abuse treatment in HIV/AIDS prevention requires focused research on:

- developing more effective strategies for recruiting intravenous drug abusers early in their drug abuse careers;
- retaining clients in treatment until treatment effects are well established; and,
- developing relapse prevention strategies.

One approach will be the development of intensive treatments for intravenous drug abusers who are non-compliant with, or fail to attend regularly or participate fully in, typical treatment programs.

Patient compliance is a major problem, even in general medicine. Many recovering addicts have difficulty adhering to their medication regimen. Strategies with alcoholics have been reported, however, that increase compliance with disulfiram (Antabuse) and which may serve as models for obtaining compliance with drug abusers. These strategies arrange for other people in the substance abuser's life to monitor compliance and to apply consequences. Research needs to be done to understand these strategies and to extend them, for example, to naltrexone use by recovering opioid users. These strategies may also be useful in ensuring compliance with treatment for other drugs of abuse.

In 1986 and 1987, NIDA initiated several demonstration research projects with objectives to develop effective strategies to prevent HIV transmission with a concomitant reduction in drug abuse among intravenous drug abusers. One of these projects was a national demonstration research effort to implement and evaluate different outreach, HIV/AIDS education, and behavioral change intervention methods targeted at intravenous drug abusers not in drug abuse treatment and their sexual partners. Initiated in FY 1987 with the funding of comprehensive projects in six cities and targeted projects in 11 communities, the program was expanded to include additional cities and additional outreach strategies in FY 1988 and is continuing at that level in 1989. The projects initiated in FY 1987 were awarded for a 3-year period with support provided through FY 1989. Thus, in FY 1990, the funding requirements for the HIV/AIDS outreach demonstration program will decrease from the FY 1989 level of $44.6 million to $33.6 million, as 9 of the initial projects 3-year periods of support are completed. The funding requirements will decrease further in FY 1991 to $13.5 million as an additional 22 projects are completed. This decrease is a result of the ending of these demonstration projects which are not meant to provide stable program support.

By the end of FY 1990, the outreach demonstration program will have generated sufficient descriptive and ethnographic data to move the program to more controlled testing of the effectiveness of intervention strategies. Further refinement of these HIV/AIDS prevention strategies and development of new strategies will be achieved through more controlled experimental designs supported under the NIDA HIV/AIDS research program.

For example, at any given time, less than 20 percent of intravenous drug abusers are in drug abuse treatment. Even if treatment recruitment rates could be increased substantially, many intravenous drug abusers will avoid drug abuse treatment and contact with other health professionals. Community-based interventions have been developed through large-scale demonstration research programs. Now, these promising strategies must be refined for use with specific target groups. Using controlled clinical trials methodology, study will be made of the efficacy of community-based interventions developed for use in containing the spread of HIV infection through changing the behaviors of intravenous drug users and their cohabitants and spouses. Specifically, the studies will explore the use of differing behavioral skills training models applied to selected sub-populations (e.g., intravenous drug users of different ethnicities and backgrounds, sex partners of intravenous drug users) encountered in differing settings (e.g., "copping" areas in the community, emergency rooms, probation and parole offices, STD clinics).

Prevention/intervention strategies need to be designed and tested that will achieve multiple behavior changes in persons at risk for drug-abuse associated HIV transmission. For those individuals who will not eliminate drug use and will not alter drug use practices, technologically based interventions must be offered in combination with the other information based interventions. Prevention research will focus on:

- strategies to prevent the initiation and maintenance of needle use and needle-sharing behaviors and to encourage cessation of such behaviors if they are established;
- outreach to get people into treatment;
- strategies to maintain participation in treatment;

- o outreach to provide information on paraphernalia sanitation principles and practices; and
- o continued effort in motivating compliance with known risk-reducing sexual practices.

The $40 million Treatment Demonstration Program began in 1989. Of this demonstration program, approximately $8.5 million in FY 1991 supports mainstreaming of drug abusers into the primary medical care system through an interagency agreement with HRSA. The latter money is shown under functional category IV.: Clinical Health Services Research and Delivery.

Other ADAMHA activities will include research on the effects of psychopharmacologic agents used in treating psychological sequelae of HIV infection and their interaction with anti-HIV drugs to allow a better understanding of the potential effects of these medications on risk-taking behavior. Such an understanding is critical to the development of effective HIV/AIDS prevention strategies.

NIAAA will initiate research on the dynamics of alcohol related behaviors that may increase the risk of contracting HIV/AIDS requiring an additional $878,000 in FY 1991. Preliminary results of the ongoing studies indicate that alcohol consumption can result in disinhibition of behaviors facilitating exposure to HIV infection through drug use and high risk sexual behaviors. The funding increase will support projects to focus on epidemiological and prevention research studies designed to elucidate the role of alcohol use in facilitating behaviors which increase the risk of exposure to HIV. These studies will, in particular, involve various high risk populations such as homosexual and bisexual men and minority groups (blacks and Hispanics) in different geographic areas. Preliminary research has demonstrated association between drinking and unsafe sexual practices among these populations.

F. Research Enhancement

NIMH efforts include expansion and initiation of new institutional and individual research training programs totalling $.5 million in two areas of basic science research--neuroscience and neuropsychiatric research--as well as behavioral and prevention research. New efforts in FY 1991 will permit emphasis on training a cadre of minority investigators. Research training program announcements have stimulated the development of a large number of high quality proposals and present an opportunity to develop researchers who will investigate important neuroscience and behavioral aspects of HIV/AIDS.

NIDA will expand training by $.7 million in FY 1991 to increase the present pool of available basic and clinical researchers focusing on drug abuse and HIV/AIDS. Since minority persons are disproportionately overrepresented in numbers of AIDS cases, the training and career development of scientists from minority population groups is especially critical.

To support a multidisciplinary approach to the study of the relationship between alcohol and HIV infection and to maintain a pool of well trained researchers in alcohol and HIV-related disciplines, NIAAA will also expand its training efforts in FY 1991 by $79,000.

II. RISK ASSESSMENT AND PREVENTION

A. Surveillance - HIV Surveys

The illicit use of cocaine has become endemic in the U.S. with many abusers using the drug intravenously. Sharing intravenous drug apparatus is the most important vector in spreading HIV in drug abusers. Further, research suggests that cocaine induces increased sexual activity and hence increased promiscuity among users, which may be a factor in the increasing number of heterosexual partners becoming infected with HIV. Surveillance of intravenous cocaine users and their sexual partners will be initiated. Approximately 20 percent of drug abusers who enroll in drug abuse treatment are chronically non-compliant--they may come to a clinic for one or two visits and are then lost to follow up. These may represent the population most likely to spread the HIV virus. A new epidemiological survey aimed at establishing the rate of HIV infection in a group of these non-compliant abusers will be instituted. The Addiction Research Center's HIV Serology Laboratory supports NIDA's efforts to establish the incidence and progression of the HIV epidemic in drug abusers over the United States. In FY 1991 $210,000 will be used to handle the increasing numbers of samples.

Surveillance - Behaviors

While HIV/AIDS research has focused on the intravenous drug abuser (primarily heroin users), epidemiological and ethnographic studies indicate that many drug abusers are polydrug or multiple-drug rather than "single drug" users or even "single route" of administration users. Cocaine is becoming a primary drug of abuse, alone intravenously, with heroin, or by smoking with other drugs; amphetamines, alcohol and marijuana are also used by those in and out of treatment. In FY 1991, research will be expanded by $.5 million to examine patterns of multiple drug abuse and multiple routes of administration.

Current estimates of intravenous drug abusers are imprecise, and various groups have emphasized the importance of better data. Intensified efforts are needed to provide reliable information on intravenous drug abuse AIDS-related phenomena including number(s) of drug users in various categories of use/abuse, geographic distribution, demographics (e.g., by age, sex, race, sexual orientation), and patterns of use by age cohorts. NIDA will continue development of new estimation methodologies and new data sources leading to more precise intravenous drug abuse prevalence assessments.

B. Population-Based Research: Natural History, Transmission, Risk Factors

With respect to the effects of psychiatric and behavioral co-factors on the course of HIV, NIMH's ongoing activities will be expanded by $1.2 million. NIMH will expand research aimed at understanding why some individuals who test seropositive develop AIDS much earlier than others. Psychiatric and behavioral co-factors may be implicated in the subsequent development of AIDS and in determining the course of illness. The FY 1991 increase will provide for new efforts to assess the role of psychiatric factors such as depression and anxiety on disease progression and immune system changes. Research will be expanded to:

- provide information on the natural history of AIDS dementia and on cofactors involved in the development of this CNS syndrome and

- gain an understanding of why some individuals who test seropositive do not develop AIDS while others do.

In 1991, population-based research will include $2.4 million in NIDA for natural history studies. To date, natural history studies have focused largely on intravenous opiate users in drug treatment. We will expand natural history studies that focus on non-treatment samples of opiate users, non-opiate intravenous drug abusers (especially cocaine injectors), and the sexual partners and children of intravenous drug abusers. Research will be expanded to provide information on aspects of HIV exposure (critical times and intensity of exposure, point of exposure, viral genetic variants), and co-factors that determine vulnerability to infection, increase transmission probability, and cause disease.

Differences in vulnerability and manifestations of disease need to be studied in various subgroups of drug abusers to identify associated factors that may inhibit or promote specific disease entities (e.g., use of nitrite inhalants and the associated clustering of Kaposi's sarcoma observed in homosexual rather than heterosexual drug abusing patients). Co-factors which are promising areas for study include genetic predisposition, cytomegalovirus infections, Epstein-Barr virus, hepatitis virus, internal parasites, malnutrition, and other infectious disease entities clinically observed in drug abusers. A high priority for research is elucidation of co-factors to help explain the excess of HIV/AIDS cases related to intravenous drug abuse among minorities. Medical conditions associated with drug abuse (e.g., sexually transmitted diseases, psychiatric illnesses, tuberculosis, and endocarditis) need further study to determine the extent to which the cause and treatment of these illnesses serve as co-factors in vulnerability to HIV infection and development of HIV-related diseases.

Questions surrounding transmission of HIV associated with drug abuse are of growing scientific and public concern. Laboratory and human studies are needed to evaluate the dynamics of HIV transmission via needle sharing, including investigation of conditions under which HIV gains entry, survives, and is subsequently released from needles, syringes, cookers and strainers ("works"). Since abused drugs are commonly diluted with quinine and lactose before being sold, the effects of these diluting substances must be examined on HIV viability. Better information regarding transmission phenomena is vital to the development of new techniques for preventing HIV transmission among needle users. Objective methods for assessing needle sharing by addicts are a high priority need. Such studies need to address development of methods for analysis of residual sera for mixed blood types in syringes and/or needles to determine validity of self- reports of needle sharing by addicted persons. In addition to HIV infection associated with intravenous drug abuse, epidemiological studies are needed to examine sexual transmission of HIV in nonintravenous forms of drug abuse (i.e., sex for drugs, and sex for money). It is particularly important to learn the extent to which unprotected sexual practices are occurring in the "crack house."

The majority of women who give birth to HIV-infected infants are intravenous drug abusers or sexual partners of intravenous drug abusers. Research is needed to identify and elucidate factors involved with maternal transmission of HIV infection in intravenous drug abuse. Studies which investigate co-factors such as type and pattern of maternal drug abuse and maternal HIV infection status are needed to determine their influence on the perinatal transmission of HIV-related diseases. In addition, these co-factors need to be examined for their effect on symptom development, clinical manifestations, and disease progression in the children. Also needed are measures that are useful in differentiating causes of developmental delay or regression in HIV-infected children of intravenous drug abusers, including trauma, neglect, malnutrition, drug exposure, other infections, etc. In vitro studies and research utilizing animal models are sought in this area. Research to develop effective educational and preventive interventions targeted to female intravenous drug abusers or females in sexual relationships with intravenous drug abusers is a high priority area.

C. Information and Education/Preventive Services

NIMH and NIDA will continue to support existing healthcare worker training projects. An additional $461,000 ($391,000, NIMH and $70,000, NIDA) will be used to expand the training of health and mental health care workers on neuropsychiatric and psychosocial aspect of HIV infection. In addition, new efforts will be undertaken to provide training and pre- and post-HIV antibody test counseling.

In the areas of counseling, testing, and partner notification, NIMH will continue to support technical assistance activities related to HIV mental health counseling with $56,000 in FY 1991.

Learning of a HIV-positive test result may have profound psychological effects on the individual, such as social isolation, paralyzing anxiety, and depression. In addition, there is a highly elevated risk of suicide in HIV positive individuals. NIMH will provide technical assistance to grantees and provide technical support to the PHS agency administering the grant program for counseling for HIV-positive individuals (Section 2441, PL 100-607). This effort will include technical assistance necessary to facilitate the integration and evaluation of mental health and counseling services into ongoing health care programs. New efforts in technical assistance will also include emphasis on the provision of mental health counseling within a program of integrated biopsychosocial care to the growing number of HIV-infected individuals, their families, caregivers, and significant others. NIMH will continue to work with HRSA to assess counseling and mental health treatment in ongoing AIDS Service Demonstration Projects.

In FY 1991, NIMH expansion in the area of health care workers and providers will emphasize training in pre- and post-HIV antibody test counseling. Such efforts are especially important given the recent recommendation that asymptomatic HIV-positive individuals receive prophylactic treatments.

Health care worker training activities will continue to integrate information about the neuropsychiatric and psychosocial aspects of HIV into primary health care training provided by HRSA ETCs.

In FY 1991, training programs will increase the focus on education in prevention strategies and will continue to support:

- integration of neuropsychiatric and psychosocial aspects of HIV into primary care training provided by HRSA ETCs;
- instruction on behavior and lifestyle factors over time in the prevention,transmission, and course of AIDS; and
- the importance of involving mental health personnel in interdisciplinary teams.

The FY 1991 increase will permit the support of four additional grants.

IV. CLINICAL HEALTH SERVICES RESEARCH AND DELIVERY

A. Services

In FY 1991, there will be a 5.5 percent decrease in community and health center services for NIDA related to reductions in demonstration projects.

D. Research

In FY 1991, there will be a 3 percent increase for inflation costs in NIMH health services research.

V. PHS-Wide Activities

C. Construction

Multiple intramural research laboratories require extensive renovation to sustain HIV/AIDS basic and applied projects. Existing laboratory facilities do not meet biological safety standards for handling HIV infected samples and viral concentrates. Depending on the research protocol, current facilities must be upgraded to either P2 or P3 biosafety levels. Specific modifications include: specialized ventilation systems, airlocks, airflow regulators, biological safety cabinets, sterilization equipment, refrigeration units, specialized flooring systems, and specialized work surfaces which can be sterilized.

The $1.6 million in FY 1991 will improve 15 laboratory modules. Upgrading will cost $110,000, on average, for each module.

JUSTIFICATION OF THE BUDGET ESTIMATES

DEPARTMENT OF HEALTH AND HUMAN SERVICES

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION

Federal Subsidy For Saint Elizabeths Hospital

Fiscal Year 1991 Budget — Page

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Federal Subsidy For Saint Elizabeths Hospital

To carry out the Saint Elizabeths Hospital and District of Columbia Mental Health Services Act, [$18,000,000] *$12,000,000*, which shall be available in fiscal year [1990] *1991* for payments to the District of Columbia as authorized by section 9(a) of the Act: Provided, That any amounts determined by the Secretary of Health and Human Services to be in excess of the amounts requested and estimated to be necessary to carry out sections 6 and 9(f)(2) of the Act shall be returned to the Treasury: [Provided further, That funds appropriated for Federal activities authorized by sections 6 and 9 of the Act, shall remain available through September 30, 1991, and may be used for administrative and maintenance functions in implementing the Act.] [1]
(Department of Health and Human Services Appropriations Act, 1990.)

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[1] This language has been deleted because it was already included in the FY 1990 Appropriations Act.

Federal Subsidy For Saint Elizabeths Hospital

Amounts Available for Obligation

	FY 1989 Actual	FY 1990 Estimate	FY 1991 Estimate
Appropriation:			
Annual....................	$23,712,000	$18,000,000	$12,000,000
Reappropriation:			
Multiple year...........	---	1,385,000	---
Subtotal, adjusted budget authority.......	23,712,000	19,385,000	12,000,000
Recovery of prior year obligations......	---	---	---
Unobligated balance, beginning of year.....	1,813,000	---	471,000
Unobligated balance, lapsing................	1,385,000	---	---
Unobligated balance, end of year...........	---	-471,000	---
Total Obligations..........	$24,140,000	$18,914,000	$12,471,000

Federal Subsidy For Saint Elizabeths Hospital

Summary of Changes

1990 Appropriation	$19,385,000
1991 Estimate	12,000,000
Net Change	-7,385,000

	1990 Estimate Base	Change from Base
Decrease:		
Program:		
Reduction in Federal Subsidy to Saint Elizabeths Hospital	$18,000,000	-$6,000,000
Termination of funding for administrative and maintenance transfer activities	1,385,000	-1,385,000
Net Change		-$7,385,000

Federal Subsidy For Saint Elizabeths Hospital
Budget Authority by Activity

	1989 Actual	1990 Estimate	1991 Estimate
1. Federal subsidy to District of Columbia.	$23,712,000	$18,000,000	$12,000,000
2. Other Federal Activities...........	---	1,385,000	---
Total Budget Authority..	23,712,000	19,385,000	12,000,000

Budget Authority by Object

	1990 Estimate	1991 Estimate	Increase or Decrease
Other Services..........	$1,385,000	---	-$1,385,000
Project Contracts.......	18,000,000	$12,000,000	-6,000,000
Total Budget Authority..	19,385,000	12,000,000	-7,385,000

Federal Subsidy For Saint Elizabeths Hospital

Authorizing Legislation

	1990		1991	
	Amount Authorized	Estimate	Amount Authorized	Estimate
1. Federal Subsidy for Saint Elizabeths Hospital, P.L. 98-621, Section 9(a)........	$18,000,000	$18,000,000	$12,000,000	$12,000,000
2. Preservation of Federal Property and Employee Separation, P.L. 98-621 Sections 6 and 9.............	Indefinite	$ 1,385,000	Indefinite	---
Total appropriation.....		$19,385,000		$12,000,000
Total appropriation against definite authorizations..........		$18,000,000		$12,000,000

Federal Subsidy for Saint Elizabeths Hospital

Appropriation History Table

	Budget Estimate To Congress	House Allowance	Senate Allowance	Appropriation
1980	$85,119,000	$85,119,000	$85,119,000	$91,915,000
1981	94,273,000	94,273,000	94,273,000	99,401,000
1982	87,000,000	94,743,000	94,743,000	95,418,000
1983	67,505,000	76,505,000	76,505,000	75,119,000
1984	62,744,000	62,744,000	67,744,000	67,744,000
1985	48,595,000	48,595,000	48,595,000	48,595,000
1986	42,488,000	43,696,000	43,696,000	43,696,000
1986 Sequester	---	---	---	-1,879,000
1987	36,353,000	36,353,000	36,353,000	36,353,000
1987 Transfer	4,428,000	---	---	---
1987 Supplmntl	---	4,428,000	4,428,000	4,428,000
1988	68,312,000	68,312,000	68,312,000	65,402,000
1989	24,000,000	24,000,000	24,000,000	23,712,000
1990	18,000,000	18,000,000	18,000,000	18,000,000
1990 Reappropr	(1,385,000)	---	(1,385,000)	(1,385,000)
1991	12,000,000			

Justification

Federal Subsidy for Saint Elizabeths Hospital

General Statement:

Public Law 98-621, The Saint Elizabeths Hospital and District of Columbia Mental Health Services Act, provides that a gradual phasedown of direct Federal subsidy for operation of St. Elizabeths Hospital be completed with the payment for Fiscal Year 1991 at the conclusion of the six year Financial Transition Period which ends on October 1, 1991. During this period the District of Columbia has assumed an increasing share of the financial responsibility for operating the hospital while pursuing the long term goal of developing a comprehensive community based mental health system for citizens of the District of Columbia.

Prior to its transfer to the District on October 1, 1987, St. Elizabeths was the largest Federal hospital in the Nation devoted only to the treatment of the mentally ill. Pursuant to the Act, the District assumed patient care and administrative responsibility for the hospital along with selected land and buildings comprising approximately half of the 336 acre complex, the majority of which were on the east-campus. The Department of Health and Human Services retained the William A. White building, Home and Relief buildings, the Museum and the fourth floor of the Center building. A use permit granted the District the right to occupy and use all of the buildings on the west-campus not already transferred, excluding buildings retained by the Department.

The Fiscal Year 1991 transitional subsidy constitutes the fifth and final authorized payment to the District of Columbia comprehensive mental health system.

The NIMH Associate Director for SEH Transition Activities continues to serve as oversight coordinator and monitor in carrying out departmental responsibilities for this complex and large-scale legislative initiative. Centralized management and programmatic leadership is provided as prescribed by the statute for residual Federal responsibilities pertaining to:

1. Administrative phasedown functions related to return to duty monitoring of Worker's Compensation cases, management and processing of litigation, claims, etc., against St. Elizabeths which arose from causes before October 1, 1987;

2. Coordinating accounting and financial management operations and closure as a Federal entity;

3. Assuring mental health care to refugees, continuance of internationally recognized research at the NIMH Neuroscience Research Center and Hospital; and pursuing administrative and legal actions to determine the details of the future Federal presence on the St. Elizabeths Hospital site;

4. Providing for normal maintenance and repairs to remaining Federal property, preservation of historic artifacts and implementing decisions on the disposition of excess property.

1. **Federal Subsidy for Saint Elizabeths Hospital**

Authorizing Legislation - P.L. 98-621, Section 9(a).

1990 Estimate	1991 Estimate	Increase or Decrease
$18,000,000	$12,000,000	-$6,000,000

1991 Authorization..................	$12,000,000

Purpose and Method of Operation

Since 1964, Saint Elizabeths Hospital has received an annual Federal subsidy for the cost of care provided at the hospital for District of Columbia patients. Beginning in FY 1983, a ten-year transition process was started, through which the District of Columbia would assume a steadily increasing share of its patient treatment costs, with the intent that it would provide full support beginning in FY 1992. The purpose of the provision was to facilitate the integration of the hospital into the District's mental health care system. This activity supports the transitional subsidy for the District.

Funding levels for the past five fiscal years were as follows:

1986....................................	$41,817,000
1987....................................	$40,781,000
1988....................................	$65,402,000
1989....................................	$23,712,000
1990....................................	$18,000,000

Rationale for the Budget Request

Section 9(a) of P.L. 98-621 authorizes declining levels for Federal subsidies to the Hospital. The amount appropriated for this purpose in FY 1990 was $18,000,000. The amount authorized for FY 1991 is $12,000,000; this is the amount which is requested for this activity.

The District continues to receive payments for mental health care from other Federal sources, such as Medicare, Medicaid, block grants and reimbursements for the care of Federal beneficiaries. Section 9(c)(2)(B) of the Act also authorizes the District to receive direct appropriations for establishing and maintaining a comprehensive mental health system.

2. Other Federal Activities

Authorizing Legislation - P.L. 98-621, Sections 9(b)(1) and 6(d)(2).

1990 Estimate	1991 Estimate	Increase or Decrease
$1,385,000	---	-$1,385,000

1991 Authorization.................. Indefinite

Purpose and Method of Operation

This account provided funds for expenses incurred directly by the Federal Government, which are necessary for the orderly and expeditious transfer of Saint Elizabeths Hospital to the District.

Rationale for the Budget Request

In FY 1988 there was an appropriation of $2,609,000 in two-year funds to be used for federal responsibilities relating to the hospital transfer.

The funds are authorized for personnel-oriented phase-out activities, including payment of added costs for the audit of accrued leave balances and preservation of Federal property.

The FY 1990 Appropriation Act, P.L. 101-166, reappropriated the funds which had lapsed at the end of FY 1989, through the end of the Financial Transition Period which is specified in the Act; until September 30, 1991. P.L. 101-166 also permits these funds to be used for other administrative and maintenance functions necessary for the implementation of the Act. No additional funds are being requested in this activity.

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